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ABSTRACT

Each of the 22 curriculum modules in this packet for instruction in agricultural supplies and services contains a brief description of the module content, a list of the major division or units, the overall objectives, objectives by units, content outline, and suggested teaching methods, student application activities, and evaluation procedures. A list of resource materials is also included in each module. Module titles are Sales of Chemicals for Agricultural Use; Sale of Feeds and Feed Stuffs; Sales of Seeds and Plants; Sales of Fertilizers; Display and Advertisement of Agricultural Products; Advanced Advertising for Agriculture; Agricultural Product Salesmanship; Recordkeeping I for Agricultural Businesses; Recordkeeping II for Agricultural Businesses or Agriculture Business Bookkeeping and Accounting; Analyzing Agricultural Business Records; Securing Employment--Employee Responsibilities; Buying and Selling Agricultural Products; Farm, Home and Garden Supply Sales; Sales of Petroleum Products and Accessories; Organizational Patterns in Agricultural Businesses; Cooperatives in Agriculture; Finance and Credit in Agricultural Businesses; Insurance for Agricultural Businesses; Income Taxes in Agriculture; Legal Aspects of Agricultural Business; Personal Financial Planning; Computations in Agriculture; and Communications in Agriculture. (HD)

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MODULES IN AGRICULTURAL EDUCATION

FOR

agricultural supplies and services

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The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Occupational and Career Curriculum
Albany, New York 12234

CE 008 151

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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MODULE OF INSTRUCTION

Title - SALES OF CHEMICALS FOR AGRICULTURAL USE Code - 01.0201-01

DESCRIPTION:

Students completing this module will develop skills and abilities needed to assist in making sales of agricultural chemicals under close supervision. Selling activities at the entry level of employment are limited to assisting customers in making their own decisions, by providing them with helpful information. Application of chemicals, sprayer calibration, or mixing of pesticides is not included. The student will not be an expert on agricultural chemicals. He will be able to assist customers with a broad range of basic pest control problems, however.

DIVISIONS OR UNITS OF CONTENT	Time Allocation	
	Class	Other
1. Use of Agricultural Chemicals in Controlling Pest and Disease	6	12
2. Safe Handling of Agricultural Chemicals	2	3
3. Selling Agricultural Chemicals	3	4
	11	19

Revised January, 1975

AE 008 157

MODULE OF INSTRUCTION

Title - SALES OF CHEMICALS FOR AGRICULTURAL USE Code - 01.0201-01

OBJECTIVES to be obtained:

The student will be able to:

1. Explain the importance of agricultural chemicals in modern agriculture.
2. Identify the important pests in the local area and the damage done by each.
3. Identify the type of chemical used to prevent or control a given pest situation.
4. Explain and/or demonstrate the safe handling and storage of agricultural chemicals.
5. Apply the correct first aid treatment in the event of an accidental poisoning from agricultural chemicals.
6. Assist the customer in selecting the appropriate chemical and the correct rate, timing and method of application for a given situation.
7. Complete the sale of agricultural chemicals using the required steps in making a sale.

Code - 01.0201-01

Title - SALES OF CHEMICALS FOR AGRICULTURAL USE

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Use of Agricultural Chemicals in Controlling Pest and Disease Objective #1 Explain the importance of agricultural chemicals in modern agriculture.	A. Crop losses due to insects, plant diseases and weed problems. . Economic value of losses locally, state and nation-wide . Decreased yields . Lower quality produce B. Economic loss due to parasites and diseases of farm animals. C. Size of agricultural chemical industry . Volume of business conducted locally . Value of sales nation-wide . Number of firms and employees D. Future of the agricultural chemical industry . Controversy over use of chemicals in food production. . Need for extreme care and caution in using chemicals. . Local job opportunities involving agricultural chemicals.
Objective #2 Identify the important pests in the local area and the damage done by each.	A. Major types of pests . Weeds . Insects and insect-like animals . Diseases . bacteria . virus . fungus . Rodents . Nematodes . Mollusks - snails and slugs B. Damage done by pests . Reduce yields . Compete for food, water, space and sunlight . Destroy property, as feed, buildings . Cause or transmit disease . Cause poisonous conditions . Annoy man or animals . Lower the quality of the product

EDUCATION

01.0201-01 - Code

SALES OF CHEMICALS FOR AGRICULTURAL USE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion to introduce subject. B. Guest speaker from a company selling agricultural chemicals. C. Field trip to one or more firms selling agricultural chemicals.	A. Each student interview a farmer, greenhouseman, nurseryman, etc. to determine affect of pests on production. B. Each student prepare a short oral presentation on the importance of agricultural chemicals to modern agriculture.	A. Written test B. Evaluate oral presentations.
A. Lecture - discussion B. Microscope demonstration of bacteria. C. Illustrate animal diseases with slides or a field trip D. Insect specimens, identified, as chewing or sucking type.	A. Students collect samples of weeds, insect-damaged plants, other evidence of damage. B. Students identify weed samples, diseased plants, other damaged produce. Use of "role-play" technique, seller and customer, may be utilized.	A. Identification tests - . Weeds . Insects . Diseases . Rodents B. Evaluate performance of seller in role-play.

Code - 01.0201-01

Title - SALES OF CHEMICALS FOR AGRICULTURAL USE

OBJECTIVES BY UNIT	CONTENT
Objective #3 Identify the type of chemical used to prevent or control a given pest situation.	Note: Emphasis is not to be placed on brand names or specific recommendations in meeting this objective. A. Major types of agricultural chemicals and the pests they control - . Herbicides - weed control . contact materials . systemics . soil sterilants . Insecticides - insect control . stomach poisons . contact poisons . repellants . attractants . Bactericides - bacterial disease control . antibiotics . sulfa drugs . Fungicides - fungus disease control . Rodenticides - rat, mice other animal pest control . Nematcides - control of nematodes . Molluscicides - control of slugs and snails
Unit 2 - Safe Handling of Agricultural Chemicals Objective #4. Explain and/or demonstrate the safe handling and storage of agricultura chemicals.	A. Key Rules for safe use of agricultural chemicals . Read the label. . Store materials in a safe place . Apply with care . Carefully dispose of empty containers. B. Safety precautions in using pesticides as they might affect crops, livestock and food products. C. Safety precaustions for the storage of pesticides. D. Personal precautions to prevent poisoning of persons handling pesticides. E. Signal words and safety precautions found on pesticide containers.

EDUCATION

01.0201-01 - Code

SALES OF CHEMICALS FOR AGRICULTURAL USE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Demonstrate effect of different types of herbicides on weeds. C. Examine healthy plant tissue and some that has been affected by herbicide. D. Demonstrate effectiveness of different insecticides on insects. E. Invite a veterinarian to speak to the class about livestock pests and controls.	A. Students collect labels from containers of pesticides commonly used in the local area. Do not remove labels from any but empty containers. The containers should not be collected either. B. Use role-playing where a student acting as seller identifies the customers problem and makes recommendations.	A. Evaluate "Seller's" performance in role-playing. B. Written test. C. Oral test, or "spelling bee" method with whole class to identify problems and controls correctly.
A. Lecture - discussion B. Films or filmstrips C. Field trip to a firm handling agricultural chemicals to see precautions in force. D. Labels from pesticide containers, with signal words evident.	A. Students display labels from containers. B. Students list safety precautions in evidence at the firm visited on the field trip. C. Students present a radio or TV show on a local station, informing local people about pesticides safety.	A. Written test B. Evaluate field trip reports. C. Evaluate student performance at supervised occupational experience placement location.

OBJECTIVES BY UNIT	CONTENT
Objective #5 Apply the correct first aid treatment in the event of an accidental poisoning from agricultural chemicals.	A. Whenever possible always - Call a doctor immediately or rush affected persons to a hospital. B. First aid treatment: . If poison has been swallowed . If poison has been inhaled . If poison has been spilled on the skin . If poison has gotten into the eyes C. Be able to name the pesticide involved and the approximate amount. D. Use of available safety charts. E. Poison - control centers - know location, telephone number, persons to be contacted.
Unit 3 - Selling Agricultural Chemicals Objective #6. Assist the customer in selecting the appropriate chemical and the correct rate, timing and method of application for a given situation.	Note: The attempt here is not to make an expert on chemicals. Rather than memorizing, students should learn to "look it up" in appropriate bulletins, catalogs, labels and other information A. Sources of information available - . College of Agriculture pamphlets and bulletins - "Cornell Recommends" . Catalogs, charts, tables and other material from chemical manufacturers . Labels on pesticide containers. B. Using information sources . Use of indexes . Meaning of various terms . Kinds of information found

EDUCATION 01.0201-01 - Code

SALES OF CHEMICALS FOR AGRICULTURAL USE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Post charts available from chemical companies illustrating first-aid practices. B. Guest speaker, as a doctor, trained fireman or other resource person knowledgeable about first-aid in poisonings. C. If possible, a field trip to a poison control center. D. Show film or filmstrip.	A. Students role-play accident situations, perform correct first-aid treatment. B. Students post safety charts in local firms.	A. Evaluate role-playing B. Written test.
A. Make copies all available sources of information available to students. B. Directed discussion - record on chalkboard the kinds of information found as students study the materials. C. Lecture - discussion to explain terms, use of indexes.	A. Students collect all information possible study catalogs and charts used in local firms. B. Role-play or game in which the student solves a given problem.	A. Evaluate role-play. B. Written test. C. Oral test.

OBJECTIVES BY UNIT	CONTENT
Objective #7 Complete the sale of agricultural chemicals using the required steps in making a sale.	Note: This objective would be met by reviewing the module on Agricultural Product Salesmanship if the student had already completed that module. In any event, the need is to apply the sales process to agricultural chemicals. A. Steps in Making a Sale . The approach . Gaining attention . Securing interest . Creating desire . Meeting objectives . Meeting sales resistance . Closing sale . Evaluating a sale or non-sale. B. Sales related skills . Using cash receipt box . Using the cash register . Charging sales . Using telephone . Weighing C. Personal Development . Attitude toward customer . Promptness . Neatness . Loyalty to employer

01.0201-01 - Code

SALES OF CHEMICALS FOR AGRICULTURAL USE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Role-playing	A. Role-playing in school. B. Experience and observation at a local firm selling agricultural chemicals.	A. Evaluate role-play B. Evaluate occupational experience. C. Written test on sales procedure.

MODULE OF INSTRUCTION

Title - SALES OF CHEMICALS FOR AGRICULTURAL USE Code - 01.0[illegible]

RESOURCE MATERIALS

A. Books - Agriculture In Our Lives

USDA Yearbooks

Farm Chemical Handbook (annual)

Weed Control: As A Science

B. Bulletins - Cornell Recommends (annual)

Commercial Publications

C. Periodicals -

"Farm Store Merchandising" - Miller Publishing Co.

"Agri-News" - Geigy - CIBA Corporation

D. Audio-visuals -

"Facts About Pesticides" - Manufacturing Chemists Assoc.

"Safe Use of Pesticides" - USDA

MODULE OF INSTRUCTION

Title - SALE OF FEEDS AND FEED STUFFS Code - 01.0202-01

DESCRIPTION:

Students in this module will develop entry level skills needed to make sales and render related customer services in a feed store. Emphasis will be on feed salesmanship, merchandising, and the economics involved in preparing and formulating animal feeds.

It will be assumed that students enrolling in this module will be able to balance rations to meet animal nutrient requirements, and will have developed basic salesmanship skills prior to enrollment.

MAJOR DIVISIONS OF UNITS OF CONTENT	Time Allocations	
	Class	Other
1. Feed Skills Needed Prior to Selling	5	10
2. Feed Merchandising	1	4
3. Feed Salesmanship Skills	1	9
	7	23

Revised January, 1975

MODULE OF INSTRUCTION

Title - SALE OF FEEDS AND FEED STUFFS Code - 01.0202-01

OBJECTIVES to be obtained:

Students will develop and demonstrate the effective ability to:

1. List the types and four specific feeds used by dairy, beef, horses, poultry, sheep, swine, rabbits, dogs, and cats.

2. List eight methods of preparing feeds, correctly explain why the preparation methods are used, and correctly identify methods used to prepare given feed samples.

3. Correctly identify 25 feed samples, indicating two major nutrients supplied by each sample.

4. Explain Federal, State, and Local regulations affecting the sale of feeds.

5. Correctly formulate a least cost analysis feed which is palatable to the animal given a problem.

6. Demonstrate ability to merchandise feeds as demonstrated by setting up effective feed store displays, and listing 6 methods used by feed dealers to merchandise feeds.

7. Demonstrate ability to proceed through the steps required in making a sale in a given situation.

Code - 01.0202-01

Title - SALE OF FEEDS AND FEED STUFFS

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Feed Skills needed prior to selling. Objective 1 List the types and four specific feeds used by dairy, beef, horses, poultry, sheep, swine, rabbits, dogs and cats.	A. Feed types . Concentrate . Roughage B. Animal use of types (relative amounts) . Simple stomached and finishing animals . Ruminants C. Specific feeds used by: dairy, beef, horses, poultry, sheep, swine, rabbits, dogs, and cats. D. Factors considered in feed selection . Nutritional value . Cost . Palatibility . Availability . Bulk
Objective 2 List eight methods of preparing feeds, correctly explain why the preparation methods are used, and correctly identify methods used to prepare given feed samples.	A. Reasons for preparing feeds . Increase palatibility . Increase digestibility . Make storing, handling and feeding easier . To mix feeds more accurately . To reduce weed contamination . To increase consumption . To improve quality . To decrease digestive disorders B. Methods of preparing feeds . Grinding . Crushing, rolling, cracking . Mixing . Pelleting . Crumbling . Cooking . Soaking . Fermenting, malting, sprouting . Other C. Identification of prepared feed samples.

EDUCATION

Module SALE OF FEEDS AND FEED STUFFS 01.0202-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A . Lecture-discussion to present facts. B . Field trips to determine area practices • Farms with different type animals • Feed dealers	A . Take note of information presented during class and on field trip(s)	A . Written or oral test.
A . Lecture-discussion to present facts. B . Field trip to feed mill to observe processes and secure samples. C . Field trip to farm to observe practices followed. D . Student practice in identifying samples.	A. Take notes on information presented. B. Study samples to identify methods used in preparation.	A . Written or oral test. B . Identification test.

OBJECTIVES BY UNIT	**CONTENT**
1. (continued) Objective 3 Correctly identify 25 feed samples, indicating two major nutrients supplied by each sample.	A . Identification of feed samples • Texture • Color • Shape • Weight • Taste • Odor B . Nutrients supplied by feed samples • Energy • Protein • Vitamins • Minerals
Objective 4 Explain, to the instructor's satisfaction, Federal, State, and Local regulations affecting the sale of feeds.	A. Federal, State and Local laws affecting feed sales • Feed additives • Labeling • Weighing • Packaging, bulk
Objective Given a problem, the student will correctly formulate a least cost analysis feed which is palatable to the animal.	A . Determining cost per pound of T.D.N. and protein. B . Formulating feeds on a least cost basis • Determining protein - Pearson's Square • Meeting energy needs • Substituting feeds . cost . palatability

Module SALE OF FEEDS AND FEED STUFFS 01.0202-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A . Demonstration	A. Presented a list of nutrients students will look up relative values of nutrients for each in a reference such as Morrison's Feeds & Feeding.	A . Evaluate student research.
B . Student practice	B. Students should memorize two major nutrients supplied for each sample.	B . Identification of samples.
C . Individual supervised study.	C. Students will practice identifying feed samples.	C . Written test on nutrients in samples.
. Lecture-discussion using feed tags, labels and copies of regulations and visuals.	A. Take note of information presented.	A . Written test.
B . Student practice.	B. Check feeds for compliance with laws in terms of labeling accurate weights, and secure packaging.	
A . Lecture-discussion to present information.	A. Students take note of information presented.	A . Written test involving solving least cost ration problems.
B . Class problem solving practice.	B. Students practice solving given problems.	

OBJECTIVES BY UNIT	CONTENT
2. Feed Merchandising Objective 6 Demonstrate, to the instructor's satisfaction, ability to merchandise feeds as demonstrated by setting up effective feed store displays and listing six methods used by feed dealers to merchandise feeds.	A . Merchandising skills • Supplies handled by business • Location of merchandise • Merchandise and information folder • Housekeeping chores • Storing merchandise • Stocking shelves • Preparing displays • Other B . Methods used by feed stores to merchandise feeds. • Pick up and delivery • Bulk Handling • Fill services of bulk bins • Contract feeding • Complete and formula feeds • Home-grown grain banks • Road service salesmen • Farm grinding and mixing • Wholesale sales • Other

Module SALE OF FEEDS AND FEED STUFFS 01.0202-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
Objective 6		
A . Lecture-discussion to present facts.	A. Practice activities in school or at cooperating feed store.	A . Observe students in a practice situation.
B . Student practice in . School . Feed store	B. Students determine area merchandising practices.	B . Written test.
C . Student information gathering to determine area merchandising practices.		

OBJECTIVES BY UNIT	**CONTENT**
3. Feed Salesmanship Skills Objective 7 Demonstrate, to the instructor's satisfaction, ability to proceed through the steps required in making a sale in a given situation.	A . Steps in making a sale • The approach • Gaining attention • Securing interest • Creating desire • Meeting objectives • Meeting sales resistance • Closing sale • Evaluating a sale or non-sale. B . Sales related skills • Using cash receipt box • Using the cash register • Charging sales • Using telephone • Weighing C . Personal development • Attitude toward customer • Promptness • Neatness • Loyalty to employer

Module SALE OF FEEDS AND FEED STUFFS 01.0202-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture-discussion to present facts.	A. Take notes on new information.	A. Evaluate students as they practice and set up a sales situation for evaluation.
B. Student role-playing.	B. Study resource material.	B. Written test on parts of sale.
C. Student practice.	C. Practice making sales.	
D. Field trip.	D. Practice store related skills.	
	E. Observe practices at feed store.	

MODULE OF INSTRUCTION

Title - SALE OF FEEDS AND FEED STUFFS Code - 01.0202-01

RESOURCE MATERIALS

A. Books - Feeds and Feeding (abridged) - Morrison

B. Bulletins -

1. Agricultural Supply-Sales and Service Occupations - Module #4 and #7 - Ohio State University.
2. Course of Study in Agricultural Occupations - Paducah Kentucky - 42001 University of Kentucky, Lexington, Kentucky. 40507
3. Feeding the Dairy Cow for Maximum returns - Cornell #1156
4. Feed regulatory rules.

MODULE OF INSTRUCTION

Title - SALES OF SEEDS AND PLANTS Code - 01.0203-01

DESCRIPTION:

This module will provide students with skills and abilities needed for employment in agricultural firms selling seeds and plants. At the entry level of employment selling is limited to assisting customers in selecting seeds and plants. Students will be able to identify common plants and their seeds. They will understand federal and state seed laws and their application. The module "Agricultural Product Salesmanship" is recommended for those who wish to gain further sales responsibility.

DIVISIONS OR UNITS OF CONTENT	Time Allocation	
	Class	Other
1. Seeds and Plants for Farm and Home	2	6
2. Selecting Seeds and Plants	4	10
3. Selling Seeds and Plants	2	6
	8	22

Revised January, 1975

MODULE OF INSTRUCTION

Title - SALES OF SEEDS AND PLANTS Code - 01.0203-01

OBJECTIVES to be obtained:

The student will be able to:

1. Explain the importance of quality seeds and plants.
2. Explain how certified seed is produced and its quality regulated.
3. Select seed using information provided on the seed tag.
4. Recognize and identify different species of seeds by their appearance.
5. Assist customers in selecting species and varieties of seeds and plants using information sources available.
6. Advise customers of recommended seeding dates for plants common to the local area.
7. Explain the use of chemical and biological seed treatments.
8. Complete a seed sale to a customer using the required steps in making a sale.

Code - 01.0203-01

Title - SALES OF SEEDS AND PLANTS

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Seeds and Plants for Farm and Home and Garden Objective #1. Explain the importance of quality seeds and plants.	A. Characteristics of good quality stock. B. Effect of the above characteristics on plant growth and production. C. Cost of good seed relative to total value of the crop. D. Importance of adapted variety. E. Percent of crop production cost allocated to seed
Objective #2 Explain how certified seed is produced and its quality regulated.	A. Process of seed formation B. Methods of improving plants C. Producing certified seed . Plant breeder . Foundation seed grower . Registered or certified seed grower D. New York Certified Seed Cooperative and its functions. E. New York seed laws and regulations.
Unit 2 - Selecting Seeds and Plants Objective #3. Select seed using information provided on the seed tag.	A. Purposes of federal and state seed laws B. Information usually found on seed tags or labels . Requirements of federal law . Requirements of state law . Cultural information provided by the grower. . Warranty or disclaimer of liability C. The "two tags" on certified seed packages D. Comparing two seed sources on the basis of information found on the seed tags.

EDUCATION

01.0203-01 - Code

SALES OF SEEDS AND PLANTS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Field trip to demonstration plots showing comparisons of crops grown with adapted and non-adapted seed. C. Guest speaker, as farmer or seedsman.	A. Write a report of field trip B. Initiate demonstration plots C. Prepare and deliver oral presentation on importance of good quality seeds and plants. D. Compute value of seed per 100 #live seed.	A. Evaluate field trip reports. B. Evaluate oral presentations.
A. Lecture - discussion B. Field trip to a certified seed grower. C. Film on producing certified seed. D. Field trip to a seed cleaning and packaging company.	A. Field trip reports. B. Prepare oral presentation (one preparation including content needed to reach objectives 1 and 2 would be appropriate)	A. Evaluate field trip reports. B. Evaluate oral presentations.
A. Lecture - discussion B. Display seed tags and labels from as many sources as possible: farm crop seeds, garden seeds, lawn seeds, other. C. Problem - solving in class to illustrate how seed can be selected using seed tags. D. Student practice of #3 E. Display seed samples correlated with their seed tags.	A. Students collect seed tags and labels. B. Students select the best lot of seed from a number of alternatives.	A. Evaluate student selections of seed, in role play, written test, or oral demonstration by student.

OBJECTIVES BY UNIT	CONTENT
Objective #4 Recognize and identify different species of seeds by their appearance.	A. Field crops B. Vegetable crops C. Ornamental plants
Objective #5 Assist customers in selecting species and varieties of seeds and plants using information sources available.	A. Factors to consider in selecting a species or variety. B. Use of information in Cornell Recommends. C. Use of information in commercial seed catalogs and other publications.
Objective #6 Advise customers of recommended seeding dates for plants common to the local area.	A. Recommended seeding dates for: . Field crops . Vegetable and garden plants . Lawn plants
Unit 3 - Selling Seeds and Plants Objective #7. Explain the use of chemical and biological seed treatments.	A. Innoculation of legume seed . Purpose . Procedure B. Chemical treatment for insects and fungi control . Federal and state regulations . Material used . Effect of seed treatment on use for food or feed.

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Seed and plant samples on display for student practice.	A. Students develop ability to identify the common crop seed and plant species by repeated study and test.	A. Identification quiz.
A. Lecture - discussion using information sources. B. Conduct role play.	A. Role play involving students as salesmen and customers. B. Students observe and participate if possible in customer-salesman contact at local firm.	A. Evaluate role play performance of student salesmen. B. Written test.
A. Display charts of recommended seeding dates. B. Conduct role play	A. Students prepare charts of recommended seeding dates and possibly post them at occupational experience placement locations. B. Role play.	A. Evaluate charts. B. Written test C. Evaluate role play.
A. Lecture - discussion B. Demonstrate proper inoculation procedure. C. Field trip to a seed warehouse to view seed treatment operations.	A. Each student inoculate a seed sample.	A. Evaluate inoculation procedure. B. Written or oral test.

Code - 01.0203-01

Title - SALES OF SEEDS AND PLANTS

AGRICULTURAL

OBJECTIVES BY UNIT	CONTENT
Objective #8 Complete a seed sale to a customer using the required steps in making a sale.	A. Physical problems involved in merchandising seed . Storage to prevent damage. . Prevention of damage to containers in handling. . Labor efficiency in handling seed. . Prevention of contamination, mixing or mistaken identity. . Waste due to spillage and breakage B. Weights and measures of seeds C. Steps in making a sale . The approach . Gaining attention . Securing interest . Creating desire . Meeting objections . Meeting sales resistance . Closing sale . Evaluating a sale or non-sale D. Sales related skills . Using cash receipt box . Using the cash register . Charging sales . Using telephone . Weighing E. Personal Development . Attitude toward customer . Promptness . Neatness . Loyalty to employer

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Field trip to a firm selling seed. C. Display containers usually used to package seed.	A. Write a report of the field trip. B. Weigh the contents of some seed containers. C. Role playing seed sales situations. D. Assist in sales at a local firm if possible.	A. Evaluate field trip report. B. Evaluate role play C. Evaluate actual sales performance when possible.

MODULE OF INSTRUCTION

Title - SALES OF SEEDS AND PLANTS Code - 01.0203-01

RESOURCE MATERIALS

A. Books - Seeds - Yearbook of Agriculture, (USDA - 1961)

B. Bulletins - "Cornell Recommends" for Field Crops
Cornell Recommends for Vegetable Crops
New York Certified Seed Cooperative Handbook

C. Periodicals -

D. Audiovisuals -

MODULE OF INSTRUCTION

Title - SALES OF FERTILIZERS Code - 01.0204-01

DESCRIPTION:

This module is designed to provide students with skills and abilities needed as an employee of an agricultural supply business selling fertilizer. Students will identify plant growth needs in relation to fertilizer and assist customers in meeting their fertilizer needs. Students will make actual recommendations to a limited extent. They will calibrate and operate some types of fertilizer applicators.

The module on Agricultural Product Salesmanship should be completed by those who wish to advance in fertilizer sales.

DIVISIONS OR UNITS OF CONTENT		Time Allocation	
		Class	Other
1.	Plant Growth Needs	2	6
2.	Fertilizer Materials	2	4
3.	Determining Fertilizer Needs	1	4
4.	Fertilizer Application	1	4
5.	Selling Fertilizer	2	4
		8	22

Revised June, 1974

MODULE OF INSTRUCTION

Title - SALES OF FERTILIZERS Code - 01.0204-01

OBJECTIVES to be obtained:

The student will develop the effective ability to:

1. Explain the economic value of fertilizer in crop production.
2. Identify nutrient deficiency symptoms common to the local area.
3. Evaluate the relative effectiveness of various fertilizer materials.
4. Collect soil samples which will provide a true measure of soil fertility.
5. Correctly measure soil pH using the Cornell pH test kit or other suitable method.
6. Determine a suitable grade of fertilizer and the rate of application needed to correct a given situation.
7. Calibrate fertilizer applicators to apply the correct amount of fertilizer evenly distributed and properly placed.
8. Complete the sale of fertilizer to a customer using the required steps in making a sale.

Code - 01.0204-01

Title - SALES OF FERTILIZERS

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Plant Growth Needs Objective #1 Explain the economic value of fertilizer in crop production	A. Amounts and kinds of fertilizer used in New York and locally. B. Fertilizer is a variable cost . Meaning of variable cost . Examples C. Returns to farmers as more money is spent on fertilizer
Objective #2 Identify nutrient deficiency symptoms common to the local area.	A. Review of plant life processes . Photosynthesis . Respiration . Transpiration . Assimilation . Growth and reproduction B. Essential nutrients for plant growth . Primary . Secondary . Micro-nutrients C. Functions of essential nutrients D. Environmental conditions affecting plant growth . Water . Light . Temperature . Soil conditions . Insects and diseases . Weeds E. Nutrient deficiency symptoms common in local area.

01.0204-01 - Code

SALES OF FERTILIZERS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Field trip to a farm or demonstration plot C. Films or slides demonstrating crop response to fertilizer. D. Review publications illustrating value of fertilizer.	A. Students record data learned from field trip. B. Students prepare and present oral topics on economics of fertilizer use. C. Evaluate an existing crop demonstration or initiate a new demonstration.	A. Evaluate field trip reports. B. Evaluate oral presentations.
A. Demonstrations with plants to illustrate life processes. B. Grow plants under controlled deficiency situations C. Colored samples of plants exhibiting poor growth or nutrient deficiencies. D. Field trip to view evidences of poor environmental conditions or nutrient deficiency.	A. Students prepare demonstrations. B. Students collect crop samples C. "Flash card" game approach to recognizing nutrient deficiency.	A. Written test B. Identification tests using slides, photos or specimens of nutrient deficiency.

Code - 01.0204-01

Title - -SALES OF FERTILIZERS

OBJECTIVES BY UNIT	CONTENT
Unit 2 - Fertilizer Materials Objective #3 Evaluate the relative effectiveness of various fertilizer materials.	A. Characteristics of commonly used fertilizer materials . Nitrogen carrying materials . Phosphorous materials . Potash materials . Lime B. Physical forms of fertilizers C. Fertilizer grade or analysis D. Fertilizer ratio E. Determining economic value of various grades of fertilizers.
Unit 3 - Determining Fertilizer Needs Objective #4 Collect soil samples which will provide a true measure of soil fertility	A. Soil sampling procedure B. Agencies making soil tests C. Information needed with soil sample for making complete soil test.
Objective #5 Correctly measure soil pH using the Cornell pH test kit or other suitable method	A. Importance of testing soil pH . pH measures soil acidity . Effect of soil acidity on plant growth . Correcting low soil acidity B. Procedure in testing for pH using the Cornell kit (or other suitable method)

01.0204-01 - Code

SALES OF FERTILIZERS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Display samples of the various fertilizer source materials and forms. B. Expose various fertilizer materials to humidity and heat and observe caking. C. Use litmus paper to demonstrate acidity or basicity of material. D. Demonstrate separation of a mixed fertilizer using a fan and relate to fertilizer application problems. E. Display labels or warning signs from toxic fertilizer materials. F. Fertilizer bags or labels for various grades on display G. Problems in determining cost per pound of plant food for various grades H. Lecture - discussion	A. Students collect empty fertilizer bags to display. B. Students collect samples of the forms and grades of fertilizer available locally C. Solve practical problems in determining the most economical purchase.	A. Identification test B. Written test on problems involving cost
A. Film, filmstrip or slides on proper soil sampling procedure B. Demonstration of correct procedure in completing soil test forms.	A. Each student collect at least one soil sample for complete test and fill out the required information on forms provided.	A. Evaluate completeness and accuracy of data forms filled out B. Oral test of problem solving nature concerning collecting soil samples under field conditions.
A. Lecture - discussion B. Slides, filmstrip or film C. Demonstration	A. Students practice pH testing in school. B. Each student test an "unknown" soil in field conditions.	A. Measure the accuracy of practice tests made on the "known" samples in school. B. Written test.

Code - 01.0204-01

Title - SALES OF FERTILIZERS

AGRICULTURAL

OBJECTIVES BY UNIT	CONTENT
Objective #6 Determine a suitable grade of fertilizer and the rate of application needed to correct a given situation.	A. Amount and kind of nutrients needed by crops common in the local area. B. Nutrients available . Determined by soil test C. Nutrients needed . Deficiency symptoms . Tissue testing D. Providing additional needs with fertilizer . Determining ratio of N.P.K. . Selecting appropriate grade . Determining rate of application E. Use of information sources . Cornell Recommends . Commercial literature
Unit 4 - Fertilizer Application Objective #7 Calibrate fertilizer applicators to apply the correct amount of fertilizer evenly distributed and properly placed.	A. Functions of applicators . Apply correct amounts . Provide even distribution . Proper placement B. Types of application equipment . Hand operated . Broadcasters . Row distributors and drills . Machines with fertilizer attachments . Liquid and gaseous fertilizer equipment . Airborne fertilizer equipment C. Calibration of applicators D. Maintenance of equipment E. Field operation

01.0204-01 - Code

SALES OF FERTILIZERS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Discussion - review of soil testing, nutrient deficiency signs. B. Demonstrate tissue testing C. Field trip to demonstration plots or farm to see response of crops to fertilization (see also objective #1 and #2). D. Lecture - discussion E. Provide many practice situations for students. F. Obtain one copy of Cornell Recommends for each student. G. Display and cause students to use commercial literature.	A. Use soil test results obtained previously. B. Each student make at least one tissue test. C. Students solve problem situations presented; in school, in field, at home, at place of business.	A. Evaluate decisions made by students regarding proper grade and rate of application for a number of given situations. B. Evaluate student assistance given customers at occupational experience placement site where possible.
A. Class discussion B. List on chalkboard as students identify types. C. Manufacturer's ads or literature to review or display. D. Demonstrate calibration of one or more types of applicators. E. Review owners manual for proper maintenance procedures. F. Demonstrate proper operating techniques.	A. Each student calibrate and operate as many different types of applicators as possible. B. Student interview local firms to determine the types of equipment used.	A. Each student evaluated on his performance in calibrating and operating application equipment using a checklist.

Code - 01.0202-01

Title - SALES OF FERTILIZERS

AGRICULTURAL

OBJECTIVES BY UNIT	CONTENT
Unit 5 - Selling Fertilizer Objective #8 Complete the sale of fertilizer to a customer using the required steps in making a sale.	A. Merchandising fertilizer . Seasonal nature of sales . Storage problems . Providing services . Advertising . Store selling . "On farm" sales B. Steps in making a sale . The approach . Gaining attention . Securing interest . Creating desire . Meeting objectives . Meeting sales resistance . Closing sale . Evaluating a sale or non-sale C. Sales related skills . Using cash receipt box . Using the cash register . Charging sales . Using telephone . Weighing D. Personal development . Attitude toward customer . Promptness . Neatness . Loyalty to employer

01.0204-01 - Code

SALES OF FERTILIZERS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Guest speaker - salesman or dealer from a firm handling fertilizer C. Field trip to a firm selling fertilizer D. Role playing	A. Role play involving students as customers and salesmen. B. Actual sales under guidance of store personnel where possible.	A. Evaluate effectiveness of student salesmen in role play. B. Evaluate student job performance C. Written test

MODULE OF INSTRUCTION

Title - SALES OF FERTILIZER   Code - 01.0204-01

RESOURCE MATERIALS

A. Books - Our Land And Its Care

The Fertilizer Handbook

Using Commercial Fertilizers

Hunger Signs In Crops

B. Bulletins -"Cornell Recommends"
Commercial Literature

C. Periodicals -

D. Audiovisuals - "How to Take a Soil Sample" - slides or filmstrip

MODULE OF INSTRUCTION

Title - DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS   Code - 01.0205-01

DESCRIPTION:

The module will provide students with introductory material about display and advertisement. Students will build displays and plan elementary promotion campaigns with selected merchandise. Much time will be spent in field trip activities involving on-the-job display assembly and maintenance. Each student will act as a member of a supply store planning an advertising calendar and budget. Students will also create displays and advertisements on selected items of agricultural merchandise.

MAJOR DIVISION OR UNITS OF CONTENT:	TIME ALLOCATIONS	
	Class	Other
1. Creation of Displays and Advertisements	2	10
2. Assembly and Maintenance of Displays	2	10
3. Building and Advertising Budget and Calendar	4	4
	8	22

Revised June, 1974

MODULE OF INSTRUCTION

Title - DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS   Code - 01.0205-01

OBJECTIVES to be obtained:

The student will be able to:

1. Create an effective product display for a given situation.
2. Create poster advertisements such as price or sale announcements.
3. Assemble and effectively display pre-packaged advertising and display materials.
4. Construct and maintain an effective product display.
5. Prepare an advertising budget and calendar for an agricultural supply business.

Code - 01.0205-01

A G R I C U L T U R A L

Title - DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS

OBJECTIVES BY UNIT	CONTENT
1. Creation of Displays and Advertisements Obj.1. Create an effective product display for a given situation	A. Objectives of displays . To promote sales . To institutionalize the business B. Elements of effective display . Cleanliness . Balance . Color harmony . Simplicity . Dramatization . Clear pricing . Provision for related selling . Adequate, appropriate, and available merchandise C. Window displays . Types · mass display of a single item · serial displays · situation displays · educational displays · public service displays . Uses in agricultural businesses D. Interior displays . Objectives · coordinate with window display · direct customer easily to department · provide for related selling · provide for customer "self selection" . Types of interior displays · counter · platform · shadow box · case · blow-ups . Proper location and placement of the display within the store . Lighting interior displays · spot · fluorescent vs. incandescent · recessed · illuminated panels . Backgrounds for displays · simplicity · coordinated color . Materials for constructing displays · creative use of ordinary materials such as chicken wire, paper-mache · crepe paper · flat paints · seamless paper

EDUCATION

01.0205-01 - Code

DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - class discussion	A. Students search trade magazines for pictures of product displays	A. Evaluate the plan for a product display created by each student.
B. Field trip to local businesses to observe various displays	B. Each student make a written plan for a display of a product (chosen by himself or assigned by the teacher) detailing the type, size, location, and other factors. A sketch would be advisable but not required.	B. Written test
C. Resource person - as a field man or salesman who frequently is required to make or assist in making product displays in local businesses		
D. Display photos or magazine pictures of product displays		

Code - 01.0205-01

Title - DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS

OBJECTIVES BY UNIT	CONTENT
1. Creation of Displays and Advertisements Obj. 2. Create poster ads such as price or sale announcements	A. What is the purpose of posters and signs B. What makes a poster or sign effective . Serves a useful purpose . Legible . Bright and colorful C. Methods of poster and sign construction . Materials . Layout design
2. Assembly and Maintenance of Displays Obj. 3. Assemble and effectively display pre-packaged advertisements and displays	A. Follow instructions as given in kit of materials. B. Determine best location in the store for the advertisement or display.
Obj. 4. Construct and maintain an effective display of a given product	A. Principles of display . Good balance . formal . informal . Emphasis B. Match type of display to the product C. Physical construction of display D. Display maintenance . Changing arrangements . Restocking . Keeping attractive appearance . Inventory control

01.0205-01 - Code

DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Demonstration B. Display of different styles, purposes in poster and sign advertising C. Student practice D. Resource person - as an art teacher to demonstrate use of materials and techniques	A. Each student make a number of poster or sign advertisements B. At least one poster ad for each student be made for and placed in a local business if possible	A. Evaluate posters and signs made
A. Supervised student practice NOTE: teachers may be able to obtain pre-packaged ad material by writing companies who advertise the same in "Home and Garden Supply Merchandiser" magazine.	A. Students locate and assemble pre-packaged ad material in local cooperating businesses	A. Evaluate location selected and assembly techniques used by students
A. Class discussion B. Field trip to observe displays in local business(if not already done) C. Supervised student practice D. Resource person - art teacher, local businessman, other	A. Students construct displays (singly or in small groups) in school or in local business	A. If displays constructed in school, evaluate as a contest, award prizes B. If displays are made in local businesses, evaluate using check sheet, students measure sales results

Code - 01.0205-01

Title - DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS

OBJECTIVES BY UNIT	CONTENT
3. Building Advertising Budgets and Calendars Obj. 5. Prepare an advertising budget and calendar for an agricultural supply firm	A. Requirements for effective advertising B. Choosing the proper item(s) to advertise C. Types of advertising, methods used and relative costs . Newspapers and "penny savers" . Radio . TV . Magazines . In-store advertising . Direct mail flyers D. Necessity for planning an advertising calendar and budget . To limit spending . Help assure wise use of time and finances E. Planning and completing an advertising calendar and budget

EDUCATION

01.0205-01 - Code

DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Supervised student experience C. Field trip to a local newspaper and/or radio/TV station to observe preparation of advertising copy D. Resource person as a local businessman or sales manager for a "penny saver" type publication to explain budgeting advertising costs	A. Students collect advertisements from various media for agricultural products B. Students prepare a budget and calendar of advertising costs for a given agricultural supply business	A. Evaluate budget and calendar prepared B. Written test

MODULE OF INSTRUCTION

Title - DISPLAY AND ADVERTISEMENT OF AGRICULTURAL PRODUCTS Code - 01.0205-01

RESOURCE MATERIALS

PERIODICALS -

"Home and Garden Supply Merchandizer" - Miller Publishing Co.,
Minneapolis, Minnesota

MODULE OF INSTRUCTION

Title - ADVANCED ADVERTISING FOR AGRICULTURE   Code - 01.0205-02

DESCRIPTION:

The major emphasis of this module will be on the extension of knowledge and practice gained by students in the module display and advertising. Students will be involved in more writing and creative activities in advertising. They will work as a team in conducting a local market survey and then prepare appropriate promotion activities.

MAJOR DIVISIONS OR UNITS OF CONTEST	Time Allocation	
	Class	Other
1. Functions and principles of advertising	2	10
2. Forms of advertising	1	2
3. Planning advertising campaigns	6	9
	9	21

Revised August, 1975

MODULE OF INSTRUCTION

Title - ADVANCED ADVERTISING FOR AGRICULTURE Code - 01.0205-02

OBJECTIVES to be obtained:

The student will be able to:

1. List the functions and principles of advertising as presented with 80% accuracy as evaluated by the teacher.
2. List seven types of advertising media as presented and give at least one example of how each would be used.
3. Plan a suitable advertising campaign or program for a theoretical business as evaluated by the teacher and/or a local store manager when given adequate information and materials.

Code - 01.0205-02

Title - ADVANCED ADVERTISING FOR AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Fundamentals and Principles of Advertising Objective 1 The student can list the functions and principles of advertising as presented with 80% accuracy as evaluated by the teacher.	A. Primary Functions . To increase sales . To secure dealers . To help dealers . To increase use per capita . To relate new products to family . To create insurance for manufacturer's business . To create confidence in quality . To eliminate seasonal fluctuations . To help keep customers sold . To create more business for all . To raise standards of living B. Secondary functions . To encourage salesmen . To furnish information to salesmen and dealers . To impress company executives . To impress company workers . To secure better employees C. Principles of Advertising Decisions . What to advertise . Where to advertise . When to advertise . How to best go about it . Factors in deciding to advertise . advertise goods or services . price cut--come-on . advertise owner or employees D. Consumer buying cycle . Awareness . Interest . Investigation . Analysis . Decision . Purchase E. Advertising appeals . People buy want satisfaction . Things people want: . convenience or comfort . love or friendship . desire for security . social approval or status . life, health, well-being . profit, savings or economy . stylishness Three basic sales appeals . thrift . service . quality Repetition

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Through a chalk board presentation identify the primary and secondary functions of advertising.	A. Field trip to large agri-business industry.	A. Prepare a written objective test to evaluate the students ability to list the functions and principles of advertising.
A. Have a discussion period to identify the principles of advertising decisions	A. Involvement of a consultant from a local advertising agency to explain to students primary and secondary functions of advertising. B. Students meet jointly with a Distributive Education class to review basic functions and principles of advertising.	
A. Chalkboard talk to identify the steps in the consumer buying cycle.	A. Students role play typical consumer buying psychology in purchase of agricultural commodities.	A For a specific advertisement student is asked to select media that is most appropriate for commodity.
A. Demonstrate basic consumer wants by offering a box of chocolate candy for sale to class.	A. Manager of an agricultural business explains the factors that are involved in consumer buying and advertising appeals.	

Code - 01.0205-02

AGRICULTURAL

Title - ADVANCED ADVERTISING FOR AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Unit 2 - Forms of Advertising Objective 2 The student can list seven types of advertising media as presented and give at least one example of how each would be used.	A. Advertising Media . Newspapers . Radio - TV . Handbills . Direct mail ads . Magazines . Outdoor signs . Retail store and window display . Others
Unit 3 - Planning Advertising Campaigns Objective 3 When given adequate information and materials the student can plan a suitable advertising campaign or program for a theoretical business as evaluated by the teacher and/or a local store manager.	A. Visualization . Know your product(s) . Know your public(s) . Know your media . Brainstorming and mental image of ad B. Layout Design . Base on visualization . Rough copy written and illustrations . Refinement of a single ad C. Arranging the components for an effective advertising campaign . Coordinating local business advertising . within the store . with outside media . newspapers, radio, TV, etc . Coordinating local campaigns with district, state, regional and national campaigns D. Producing an effective advertising campaign . Establishing a calendar and budget . Select product . Select media . Coordinate campaign components . Visualize and layout of rough copy . Final advertising

E D U C A T I O N

01.0205-C2 - Code

ADVANCED ADVERTISING FOR AGRICULTURE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Field trip to local newspaper to observe how advertising is set up. B. Discussion of types of advertising media and selection of proper media for specific requirement		
A. Chalkboard talk B. Teacher demonstration and student practice	A. Students are asked to create their own advertisement for a specific agricultural commodity.	A. Prepare appropriate materials and information to evaluate the students ability to plan an advertising campaign or program for a business described in the information given students
A. Chalkboard talk B. Field trip to local store to observe component arrangement	A. For a specific advertising campaign students list the steps required in coordinating various components of the campaign.	
A. Chalkboard talk B. Field trips to local store C. Student practice under teacher supervision D. Reference person from local advertising firm to help students would be most helpful	A. Field trip to local store to select products for use in campaign and to set up advertising materials at the end of the session.	

MODULE OF INSTRUCTION

Title - ADVANCED ADVERTISING FOR AGRICULTURE Code - 01.0205-02

RESOURCE MATERIALS

Books:

1. Introduction to Advertising - Brewster, Palmery, Ingraham. McGraw-Hill, 1954
2. Advertising Methods and Media - Walter A. Gaw, Wadsworth Pub. Co., San Francisco, 1961
3. Advertising-Creative Communications with Consumers - Harry Hepner. McGraw-Hill, 1964

Bulletins:

1. Effective Advertising - Small Business Administration, Administrative Management Course Program Topic 14, 1965.
   Order from: Supt. of Documents, U. S. Gov.Printing Office
   Washington, D. C. 20402. Price $1.25

MODULE OF INSTRUCTION

Title - AGRICULTURAL PRODUCT SALESMANSHIP Code - 01.0205-03

DESCRIPTION:

Elementary salesmanship presents students with the task of practicing and perfecting the making of a sale. Each student will spend a majority of his or her time making sales under simulated and actual conditions. Students will be expected to use and apply knowledge about agricultural products gained in other modules.

MAJOR DIVISIONS OR UNITS OF CONTENT	Time Allocations Class	Time Allocations Other
1. Developing sales presentation skills	4	11
2. Using sales equipment	5	10
	9	21

Revised June, 1974

MODULE OF INSTRUCTION

Title - AGRICULTURAL PRODUCT SALESMANSHIP Code 01.0205-03

OBJECTIVES to be obtained:

The student will be able to:

1. Correctly list the eight steps involved in a complete sales presentation.

2. Express sufficient knowledge of at least two agriculture products or classes of products to perform a complete sales presentation to the instructor's satisfaction.

3. Perform sales presentations involving selected merchandise, under given conditions, until all steps of a complete sales presentation has been successfully involved.

4. Evaluate at least five sales presentations, correctly identifying the steps involved and indicating improvements needed on an evaluation form provided.

5. Accurately operate a cash register, using procedures taught by the instructor, meeting standards of time for given problems.

6. Correctly fill in given sales slips and file them as instructed.

7. Correctly make change, meeting standards of time and oral counting procedures, as established by the instructor.

8. Use the telephone to make a sales presentation, following established rules of telephone usage and proper sales procedure with 80% accuracy as evaluated on a scorecard developed for this purpose.

9. Weight, package, and mark a given product, using pricing scales, to standards acceptable for retail sales.

OBJECTIVES BY UNIT	CONTENT
1. Developing sales presentation skills Objective #1 Correctly list the Eight steps involved in a complete sales presentation.	Eight steps involved in a sales presentation. A. Approaching the prospective customer B. Gaining the customer's attention C. Securing the customer's interest in the product or service D. Create a desire in the customer to buy E. Meet objections the customer may have F. Meet sales resistance G. Close the sale H. Evaluate the sale
Objective #2 Express sufficient knowledge of at least two agriculture products or classes of merchandise to perform a complete sales presentation to the instructor's satisfaction.	A. Why knowledge of the product is important. . Using knowledge to be successful in each part of a sale . Establishing a reputation as a salesman . To help you decide when to and when not to sell B. How to obtain and learn information about a product. . Sources of information . manufacturers . users . sellers . Learning information . obtain it . organize it . study it . use it . study it again and again......

DUCATION

Module AGRICULTURAL PRODUCT SALESMANSHIP 01.0205-03

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture discussion. List the eight steps on an overhead transparency, and discuss each. B. Use pages 134 through 142 as directed to help each student understand each step. C. Stress importance of building each step into the students' sales presentations for objective #3.	A. Students take note of new material. B. Each student fill in requested information for pages 134-142 and take an active part in class discussion. C. Each student memorize the eight steps. D. Students will use the eight steps in their sales presentations.	A. Evaluate student's written comments pages 134-142. B. Written quiz to determine if students know all eight steps. Repeat this quiz at end of module.
Lecture - Discussion to demonstrate how knowledge works into each part of a sale. B. Class discussion - to bring out examples of sales lost due to lack of knowledge. Individual student research and supervised study as student's obtain and learn information.	A. Students take note of new information. B. Each student develop a sales folder for two agriculture products or classes of merchanidse and learn the information in it.	A. Evaluate the sales folders each student developes. B. Evaluate student's knowledge of information during sales presentations.

OBJECTIVES BY UNIT	**CONTENT**
Objective #3 Perform sales presentations involving selected merchandise, under given conditions, until all steps of a complete sales presentation have been successfully involved.	A. Knowledge needed to perform presentation. . Knowledge of the proposition . Knowledge of salesmanship . Knowledge of human nature B. See evaluation sheets pages 141-142 to determine characteristics desired in a sales presentation. C. Sales techniques that may be found in many excellent sales books. Examples of rules to develop . Don't fight your prospects . Develop the "YOU" attitude . Plan your opening statement . Use a positive approach . "Don't sell the steak-sell the sizzle" . Don't sell the product - sell its advantages . An objection is often a reason for buying in disguise . Use words that describe and give feeling . Dress the part . Only good practice will develop a good salesman
Objective #4 Evaluate at least five sales presentations correctly identifying the steps involved and indicating improvements needed on an evaluation form provided.	A. Parts of sales and presentations from objectives 1, 2, and 3. B. Student form EVALUATING A SALES DEMONSTRATION.

EDUCATION

Module AGRICULTURAL PRODUCT SALESMANSHIP 01.0205-03

TEACHING METHOD	**STUDENT APPLICATION ACTIVITY**	**EVALUATION PROCEDURES**
A. Tape some exciting reading on salesmanship techniques and play the tape to the class to stimulate interest. B Encourage each student to read a book on basic salesmanship. C. Demonstrate a sales presentation. D. Invite a local outstanding salesman into the class. E. Have students perform sales presentations, as some of the others watch.	A. Take note of new information. B. Read a book on salesmanship, give a brief report about the book to the class. C. Students will make two or more sales presentations in class and be evaluated by others.	A. Evaluate students' sales presentations on the attached forms.
A. Lecture - discussion to show students how to use the form - Evaluating a Sales Demonstration. B. Student Practice - students will evaluate their own presentations on the form - WHAT WENT WRONG - EVALUATING A SALE and evaluate others on the form EVALUATING A SALES DEMONSTRATION.	A. Take note of procedure to follow. Example - While one student is giving a sales presentation to the instructor, several others may be evaluating him while others are preparing presentations, using the cash register, using the scales, or giving a sales presentation over the telephone to another student.	A. Collect and evaluate forms for their accuracy and completeness.

OBJECTIVES BY UNIT	**CONTENT**
2. Using sales equipment Objective #5 Accurately operate a cash register, using procedures taughts by the instructor, meeting standards of time and accuracy for given problems.	A. Parts of the cash register. B. Operation of the cash register. C. Importance of accuracy. . How to correct mistakes
Objective #6 Correctly fill in sales slips and file them as instructed.	A. Purposes of sales slips. . Receipt for customer . Record of sales for business . cash or charge . saleman making sale - for commission or evaluation . to check against inventory . to determine when to reorder . for tax purposes . to evaluate profits or losses of items B. Using the forms. . Operation of receipt boxes . Filling them in completely . Accuracy and neatness . Making good copies . Distributing the forms as instructed . Correcting mistakes

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Demonstration of cash register parts and operation to include changing the tape and minor maintenance. B. Student practice. Give students practice problems to complete in a given time. A timer on the instructor's desk can be used.	A. Take note of cash register parts and operation. B. Practice operating the cash register.	A. Evaluate student problems on timed exercises.
A. Lecture - discussion on purposes of forms and use of them. B. Demonstration - filling in the forms and distributing them. C. Student practice - students may fill in forms with information used on cash register.	A. Take note of new information. B. Practice filling in forms with information provided.	A. Evaluate completed forms: . Accuracy . Neatness . Completeness . Filed correctly

OBJECTIVES BY UNIT	CONTENT
Objective #7 Correctly make change, meeting standards of time and oral counting procedures, as established by the instructor.	A. How to count change and return it to the customer. . Don't put away bills until the customer has received and accepted change. . Count off all change to the customer as you return it. . count off smallest coins first starting with amount paid for the item . Thank the customer when his change is returned.
Objective #8 Use the telephone to make a sales presentation, following established rules of telephone usage and proper sales procedure with 80% accuracy as evaluated on a scorecard developed for this purpose.	A. Using the telephone for business purposes. . Answering the telephone . Recording messages . Selling over the telephone . proceed through parts of a sales presentation . use descriptive terminology . importance of voice control and courteous speech . Calling on the telephone . identify your business and yourself . state your purpose . if selling follow parts of sales presentation

Module AGRICULTURAL PRODUCT SALESMANSHIP 01.0215-03

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Demonstration - how to make change. B. Student practice - students may make change for given problems while being recorded. The recording will later be evaluated to determine time and accuracy.	A. Take note of change making procedure and instructions for practice sessions. B. Practice making change.	A. Evaluate students' ability to make change in terms of accuracy and time.
A. Lecture - discussion on use of the telephone. B. Demonstration of proper methods. Student practice.	A. Students will take note of new information and procedures to follow. B. Each student will make at least one complete sales presentation over the telephone. This can be to the instructor or to another student while it is being recorded to be evaluated by the instructor later.	A. Use evaluation form to evaluate students' ability to effectively use the telephone.

OBJECTIVES BY UNIT	CONTENT
Objective #9 Weigh, package, and mark a given product, using pricing scales, to standards acceptable for retail sales.	A. Using pricing scales. . Checking for accuracy . Reading the scales . Weighing products . be accurate but give the customer the benefit if not on an exact cent . add to the product on the scale, rather than take away to develop better customer satisfaction . Be courteous and act willing to help B. Packaging. . Bagging . paper bags . plastic bags with ties . Wrapping . how to fold and secure . taping C. Marking products. . Accuracy . Make prices legible . Mark where prices are readily seen

DUCATION

Module AGRICULTURAL PRODUCT SALESMANSHIP 01.0205-03

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture - discussion. B. Demonstrations. C. Student practice - students weigh bulk birdseed and package it to be sold by the FFA or use sand that can be reused.	A. Take note of new information and procedure to follow. B. Practice weighing, marking, and packaging as instructed.	A. Evaluate students' ability to weigh, package, and mark items.

MODULE OF INSTRUCTION

Title - AGRICULTURAL PRODUCT SALESMANSHIP Code - 01.0205-03

RESOURCE MATERIALS

A. Books -

Pederson and Wright. Salesmanship Principles and Methods. Richard D. Irwin, Inc. 1961.

Weyant, Hoover, McClay. An Introduction to Agricultural Business and Industry. Interstate. 1966. (See pages 208-227)

Course of Study in Agricultural Occupations. Department of Agricultural Education, University of Kentucky, Lexington, Kentucky. 1967.

Successful Selling. Dell Publishers. 1961.

B. Periodicals -

Farm & Power Equipment. 2340 Hampton Avenue
St. Louis, Mo. 63139

Farm Store Merchandising. P.O. Box 1291, Minneapolis, Minn. 55440

Home & Garden Supply & Merchandising. P.O. Box 1291, Minneapolis, Minn. 55440

Agricultural Product Salesmanship

Change making exercise

On your right you have a customer change box containing a $10 bill. On your left you have a store cash box containing five $1 bills, two $5 bills, four quarters, five dimes, five nickels, and ten pennies.

Complete each of the following transactions giving the customer the least number of coins for each transaction and orally counting the change. At the end of the exercise write down the amount of each coin left in the customer's and the store's cash box. Start the tape recorder before you begin.

1. A customer's purchase comes to $5.65. He gives you a $10 bill.
2. A customer's purchase comes to $1.38. He gives you two $1 bills.
3. A customer's purchase comes to $2.02. He gives you two $1 bills and a quarter.
4. A customer returns goods worth $15.55. Pay him this amount.
5. A customer buys goods worth $9.67. He gives you a $10 bill.
6. A customer buys goods worth $ .78. He gives you three quarters and a nickel.
7. A customer buys goods worth $5.30. He gives you a $5 bill a quarter and a dime.

Evaluation

1. Change left in customer's box.
2. Change left in store's box.
3. Time elapsed________________________(determined by instructor)
4. Oral counting procedure_____________(Determined by instructor)

Agricultural Product Salesmanship

Weighing Exercise

Weigh the following on the large scales. Attach labels as instructed. (Each number corresponds to a filled bag)

1. Charge 15¢ per lb.
2. Charge 20¢ per lb.
3. Charge 70¢ per lb.
4. Charge 45¢ per lb.
5. Charge 49¢ per lb.

Weigh the following on the small scales. Attach labels as instructed. (Each letter corresponds to a filled bag)

A. Charge 25¢ per lb.
B. Charge 30¢ per lb.
C. Charge 35¢ per lb.
D. Charge 20¢ per lb.
E. Charge 15¢ per lb.

Cut the labels below and attach them to the bags you have weighed.

WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______
WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______
WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______	WT. ______ $ ______ $/lb. ______

I - Add each problem, remembering to include sales tax. (Sub-Total, Tax, Total)

1.	2.	3.	4.	5.	6.
$.45	$5.55	$.85	$3.98	$.12	$5.75
$.65	$1.02	$.75	$5.50	$.25	$ .75
$.75	$ .75	$.98	$7.75	$.98	$ .12
$.98	$3.98	$.25	$3.10	$.75	$4.50
$.33	$2.98	$.98	$1.57	$.33	$ .05

2. Figure the GRAND TOTAL for the above problems.

II - Read the following problems carefully, total - add sales tax where it applies.

1. Mr. Swanson bought two 6 cu. ft. bales of peat moss $2.97 each; a Briggs, Stratton Engine 22" Starter Motor $44.98; three 20 gallon galvanized garbage cans $2.49 each; 12 extra heavy poly plastic trash liners for $.76; a 16' aluminum extension ladder $12.88.

2. Mr. Smith took $.75 worth of bottles back to the grocery store, bought 3 doz. California oranges for $1.05; a 6 lb. picnic smoked ham $.45 lb.; 3 lb. ground chuck $.89 lb.; 5 lbs. Cortland apples for $.59.

3. Mr. Jones charged three 100 lbs. bags of pig starter $4.00 per bag; 25 lbs. of milk replacer at $5.00; a quantity of hardware for $6.89. He then paid $10.00 on his bill to the store.

4. Mr. Brown purchased **eight** pails at $1.39 per pail (ring up each pail at $1.39 separately); 300 ft. of plastic line at $.07 per foot; 50 tags at $.04 per tag; 3 pairs of gloves $2.98 each; a box of shells for $3.25. Mr. Brown charged everything except the shells.

5. Mr. Ames went to a lumber store that was having a liquidation sale. 25% discount on all merchandise - cash and carry - all sales final. He bought a medicine cabinet Reg. $25.00; a 7-inch circular saw Reg. $21.98; 10, 2 x 4 white fir studs Reg. $.75 each; 2 pre-hung aluminum storm doors $18.98 each. (Remember to figure the 25% discount)

6. Figure the GRAND TOTAL for the above problems.

MODULE OF INSTRUCTION

Title - RECORDKEEPING I FOR AGRICULTURAL BUSINESSES Code - 01.0206-01

DESCRIPTION:

The daily recording aspects of agricultural business will be examined by students. Students will, under simulated conditions, and in actual situations examine and prepare forms used during customer transactions in agriculture businesses. Students will develop skill in using inventory and stock control records, sales records, and other business information records.

MAJOR DIVISION OR UNITS OF CONTENT:	Time Allocations	
	Class	Other
1. Needs for Business Records	1	2
2. Inventory and Stock Control Records	1	5
3. Sales Records	2	11
4. Business Information Records	1	7
	5	25

Revised January, 1975

MODULE OF INSTRUCTION

Title - RECORDKEEPING I FOR AGRICULTURAL BUSINESSES Code - 01.0206-01

OBJECTIVES to be obtained:

The student will be able to:

1. List five reasons for keeping accurate complete records of a business.

2. Correctly fill out inventory and stock control records given the necessary forms and information.

3. Correctly fill out sales records of cash and credit sales given the necessary forms and information.

4. Correctly record and file forms used during payment by a credit customer given the necessary forms and information.

5. Correctly record and file forms used during return or exchange of goods by a customer given the necessary forms and information.

6. Correctly fill in business information records, studied in class, with given information given the necessary forms.

7. Correctly record personal employee information as directed by the instructor given the necessary forms and information.

AGRICULTURAL

Module RECORDKEEPING I FOR AGRICULTURAL BUSINESS 01.0206-01

OBJECTIVES BY UNIT	**CONTENT**
Unit 1 - Needs for Business Records Objective #1 List five reasons for keeping accurate complete records of a business.	A. Needs for business records . Determine overall profit or loss . Analyze parts of business . Tax purposes . Use as a basis for future decisions . Secure financial aid . Picture of past history . Other B. Characteristics of records . Up to date . Complete . Neat . Accurate

Unit 2 - Inventory and Stock Control Records
Objective #2
Given the necessary forms and information correctly fill out inventory and stock control records.
	A. Stock control records
	. Importance of Keeping
	. Types of records
	  . records of incoming goods
	  . records of removal of goods
	  . examples of forms used
	B. Inventory records
	. Purpose of records
	. Forms used
	. Frequency and time of year
	. Inventory methods
	  . cost method
	  . retail method
	C. Techniques of keeping records.

EDUCATION

odule RECORDKEEPING I FOR AGRICULTURAL BUSINESS 01.0206-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture-discussion B. Field trip or resource personnel in class to see a complete set of records and follow them from sale to balance sheet.	A. Develop a list of reasons for keeping accurate complete records.	A. Written Test
Lecture-discussion B. Demonstration of records used by various businesses C. Field trip to observe how a business maintains stock control. D. Student practice	A. Take notes of lecture discussion and study sample forms. B. Practice filling out forms during class sessions.	A. Evaluate students' ability to fill out forms.

OBJECTIVES BY UNIT	CONTENT
Unit 3 - Sales Records Objective #3 Correctly fill out sales records of cash and credit sales given the necessary forms and information.	A. Purpose of Sales records. B. Filling out the sales slip. . Accuracy . Completeness . Neatness C. Distributing and filing copies of sales slips. . Cash sales . Credit sales
Objective #4 Correctly record and file forms used during payment by a credit customer given the necessary forms and information.	A. Forms used for cash receipts on account. B. Filling out received on account forms. . Accuracy . Completeness . Neatness C. Distributing and filing copes of forms used.
Objective #5 Correctly record and file forms used during return or exchange of goods by a customer given the necessary forms and information.	A. Forms used for exchange of goods or returned items. B. Procedure followed for accepting goods returned. C. Filling out and distributing forms properly.

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture -discussion on importance of sales records. B. Demonstration on types of records used and filling them out and filing them.	A. Practice filling sales slips out for cash and credit sales and filing copies accordingly.	A. Evaluate students' ability to fill out sales slips and distribute them correctly.
A. Demonstration B. Student practice	A. Practice filling out received on account forms and filing them as directed.	A. Evaluate students' ability to fill in and file received on account forms.
A. Demonstration . Class . Business establishment B. Student practice	A. Practice filling out forms used for exchange or return of goods. B. Be involved in a role playing session involving procedure followed for return of goods.	A. Evaluate students' ability to complete a transaction involving returned or exchanged goods.

OBJECTIVES BY UNIT	**CONTENT**
Unit 4 - Business Information Records Objective #6 Correctly fill in business information records, studied in class, with given information given the necessary forms.	A. Types of business information records used in agricultural businesses . Telephone call forms . Customer complaint forms . Customer Inquiry forms . Petty cash disbursement records . Purchase requisition forms . Purchase order forms . Other B. Procedure for filling in and distributing forms.
Objective #7 Correctly record personal employee information as directed by the instructor given the necessary forms and information.	A. Types of personal employee records . W-2 form . Time records . Earnings records . Production or activity records . Other B. Procedures for filling in personal employee records. . Accuracy . Completeness . Neatness . Discretion

DUCATION

Module RECORDKEEPING I FOR AGRICULTURAL BUSINESS 01.0206-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Field trip(s) to observe forms used by agri-business B. Student practice in using various forms.	A. Develop a list and collection of types of forms used by agri-businesses. B. Practice using forms in class.	A. Evaluate students' ability to select and properly use forms.
A. Field trip(s) to observe forms and procedures used by agri-businesses. B. Student practice using various forms.	A. Develop a list and samples of personal employee forms used by agri-businesses. B. Practice using forms during class sessions.	A. Evaluate students' ability to correctly use personal employee forms.

MODULE OF INSTRUCTION

Title - RECORDKEEPING I FOR AGRICULTURAL BUSINESSES Code - 01.0206-01

RESOURCE MATERIALS

A. Books - Richert, G.H., Meyer, W.G., and Haines, P.G. Retailing Principles and Practices. 4th Edition (New York: McGraw-Hill Book Co., Inc.) 1962

Mswonger, Fess, Accounting Principles, 9th Edition, Southwestern Publishing Company, Cincinnati, Ohio

Williams, Jackie. Vocational Education for Bookkeepers and Related Workers. Business Education, an evaluative inventory. National Business Education Assoc. Yearbook, Chapter 5. Washington D.C. 1968

Phillips, Managing for Greater Returns. Manhattan, Kansas: Agric. - Research, Inc.

*An Introduction to Agriculture Business and Industry - Weyant. Hoover - McClay (Chapter 5) - Interstate Printers and Publishers

Course of Study in Agricultural Occupations - Kentucky Dept. of Agricultural Education, Lexington, Kentucky.

*Especially useful

B. Bulletins - Business Procedures Used in Agricultural Services. Ohio Curriculum Materials Service. Ohio State University.

*Business Procedures. Module No. 6, Center for Research, Ohio State University.

Use a Flow Chart to Teach Recordkeeping. Balance Sheet, Vol. XLIX, No. 4, December 1967, pp. 148-150

*Agricultural Supplies Business and Service. Ohio Curriculum Material Service. Ohio State University.

*Especially Useful

C. Audiovisuals -

*1. The teacher must secure examples of the record forms used in the module from area agribusinesses and permission to duplicate them.

2. Yearly statements (balance sheets) which are usually in the coop's or firms journal such as Agway Cooperator or Eastern Breeders Journal.

MODULE OF INSTRUCTION

Title - RECORDKEEPING II FOR AGRICULTURAL BUSINESSES OR AGRICULTURE BUSINESS BOOKKEEPING AND ACCOUNTING

Code - 01.0206-02

DESCRIPTION:

Bookkeeping in agricultural business is a necessity. This module provides the student with opportunity to examine and make entries in books. Students will also be involved with accounting procedures used in business analysis. Analyzing records and preparing budgets are as important as accurate records in a business and will be dealt with in this module.

	Time Allocations	
MAJOR DIVISIONS OR UNITS OF CONTENT:	Class	Other
1. Accounts Receivable and Payable	2	6
2. The General Ledger	2	6
3. Analyzing Records	2	5
4. Preparing a Budget	2	5
	8	22

Revised Jan. 1975

MODULE OF INSTRUCTION

Title - RECORDKEEPING II FOR AGRICULTURAL BUSINESS OR AGRICULTURE BUSINESS BOOKKEEPING AND ACCOUNTING

Code - 01.0206-02

Objectives to be obtained:

The student will be able to:

1. Select and correctly record information which should be placed in the accounts receivable and accounts payable ledger, given records of daily business transactions.

2. Select and correctly record information which should be placed in the income and expense accounts of the general ledger, given records of daily business transactions.

3. **Given the necessary information, correctly place it in the asset, liability, or proprietorship account in the general ledger.**

4. Correctly use the information to prepare an accurate profit and loss statement for an established period of time, given income and expense accounts from a general ledger.

5. Correctly use the information to prepare an accurate balance sheet, given asset and liability accounts from a general ledger.

6. Prepare a budget for a given period of time, which meets the approval of the instructor, given a set of records, a description and a list of expectations of an agri-business.

AGRICULTURAL

Module RECORDKEEPING II FOR AGRICULTURAL BUSINESS 01.0206-02

OBJECTIVES BY UNIT	CONTENT
Unit 1 Accounts Receivable and Payable Objective 1 Given records of daily business transactions, select and correctly record information which should be placed in the accounts receivable and accounts payable ledger.	A. Purposes of accounts payable and receivable ledgers. B. Information contained in each. C. Making entries . Debits and credits . Calculating balances . Accuracy . Neatness . Frequency of recording
Unit 2 The General Ledger Objective 2 Given records of daily business transactions, select and correctly record information which should be placed in the income and expense accounts of the general ledger.	A. Parts of the general ledger . Assets accounts . Liability accounts . Proprietorship accounts . Income accounts . Expense accounts B. Information contained in income and expense accounts Income: . Sales . Discounts . Interest . Miscellaneous Expense: . Rent . Electric . Wages . Telephone . Taxes . Insurance . Other C. Making entries . Determining location . Accuracy . Neatness . Frequency of recording . Balances

EDUCATION

Module RECORDKEEPING II FOR AGRICULTURAL BUSINESSES 01.0206-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture discussion B. Field trip(s), to observe actual records in an agribusiness. C. Demonstration of making entries - use overhead. D. Student practice	A. Take notes on new information B. Practice making entries in accounts ledgers.	A. Evaluate entries made by students in accounts ledgers. . Proper placement . Accuracy of copying . Completeness . Neatness
A. Lecture discussion B. Field trip(s) to observe actual records. C. Demonstration of making entries - use overhead. D. Student practice	A. Take notes on new information. B. Practice making income and expense entries in general ledger.	A. Evaluate entries made by students in general ledger . Proper placement . Accuracy of copying . Completeness . Neatness

OBJECTIVES BY UNIT	CONTENT
Objective 3 Given the necessary information correctly place it in the asset, liability, or proprietorship account in the general ledger.	A . Information contained in: . Asset accounts . Liability accounts . Proprietorship accounts B . Making entries C . Determining net worth
Unit 3 - Analyzing Records Objective 4 Given income and expense accounts from a general ledger, correctly use the information to prepare an accurate profit and loss statement for an established period of time.	A. Purpose of operating statements B. Parts of a typical statement . Income . Expenses . Profit or loss C. preparing simple operating statements

EDUCATION

Module RECORDKEEPING II FOR AGRICULTURAL BUSINESSES 01.0206-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Demonstration - using overhead projector. B. Student practice.	A . Take notes on new information. B . Practice making entries in general ledger.	A . Evaluate students entries in general ledger. . Proper placement . Accuracy . Completeness . Neatness
A. Lecture - discussion B. Demonstration using overhead. C. Student practice	A . Take notes on new information B . Practice preparing operating statements.	A . Evaluate students ability to: B . Prepare an operating statement. . Proper placement . Accuracy . Completeness . Neatness

OBJECTIVES BY UNIT	CONTENT
Objective 5 Given asset and liability accounts from a general ledger, correctly use the information to prepare an accurate balance sheet.	A . Purpose of balance sheets B . Preparing the balance sheet . Liabilities . Assets . Net worth
Unit 4 - Preparing a Budget Objective 6 Given a set of records, a description and a list of expectations of an agri-business, prepare a budget for a given period of time, which meets the approval of the instructor.	A . Purposes of budgets B . Limitations of budgets C . Preparing a budget

EDUCATION

Module RECORDKEEPING II FOR AGRICULTURAL BUSINESSES 01.0206-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Demonstration B. Student practice	A. Take notes on new information B. Practice preparing a balance sheet.	A. Evaluate students ability to prepare a balance sheet. . Proper placement . Accuracy . Completeness . Neatness
A. Demonstration of actual budgets. B. Student practice.	A. Take notes on new information. B. Practice preparing a budget	A. Evaluate students ability to prepare a budget, given necessary information

MODULE OF INSTRUCTION

Title - RECORDKEEPING II FOR AGRICULTURAL BUSINESSES Code - 01.0206-02

RESOURCE MATERIALS

A. Books - Wingate and Weiner. Retail Merchandising, 628 pp.
Cincinnati: Southwestern Publishing Co.

Agricultural Business and Industry - Weyant, Hoover, McClay
Published by Interstate, Danville, Illinois

Course of Study in Agricultural Occupations - Paducah, Kentucky.
University of Kentucky, Lexington, Kentucky

B. Bulletins -

Agricultural Supplies Business and Service - Ohio Curriculum Materials Service, Ohio State University.

Business Procedures - Module No. 6 - Center for Research and Leadership Development - Ohio State University

C. Visuals should be prepared or secured.

MODULE OF INSTRUCTION

Title - ANALYZING AGRICULTURAL BUSINESS RECORDS Code - 01.0206-03

DESCRIPTION:

Students having knowledge of recordkeeping will develop abilities to analyze and compare records from similar businesses. Students will calculate measures of business efficiency and use the calculations to analyze agriculture businesses. Time will be spent conferring with managers and accountants about this financial control systesm.

MAJOR DIVISIONS OR UNITS OF CONTENT	Time Allocations	
	Class	Other
1. Understanding Business Analysis	2	3
2. Determining Business Measures	4	11
3. Analyzing Business Records	2	8
	8	22

Revised January, 1975

MODULE OF INSTRUCTION

Title - ANALYZING AGRICULTURAL BUSINESS RECORDS Code - 01.0206-03

OBJECTIVES to be obtained:

The student will be able to:

1. Correctly list three purposes for analyzing agriculture business records.

2. Differentiate, to the instructor's satisfaction, between a business summary and a business analysis.

3. Correctly list a minimum of six measurable factors affecting returns to a business.

4. Given the necessary records, correctly calculate amounts for at least five of the factors, affecting returns to the business for which you have records.

5. Correctly calculate at least ten selected business measures used in financial statement analysis for the business for which you have records.

6. Analyze records of two or more businesses in terms of the factors in objectives 4 and 5, then recommend, to the instructor's satisfaction, business changes based on your analysis.

Code - 01.0206-03

AGRICULTURAL

Title - ANALYZING AGRICULTURAL BUSINESS RECORDS

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Understanding Business Analysis Objective 1 Correctly list three purposes for analyzing agriculture business records.	A. Purposes for analyzing business records . To determine how a business is doing at a given time . To determine why a business is as it is . A means of evaluating each part of the business as well as the whole . Provide information for comparison with established "benchmarks" or other similar businesses . Provide information for budgeting changes in a business . Other
Objective 2 Differentiate to the instructor's satisfaction between a business summary and a business analysis.	A. Business summary--forms allowing you to see how the business as a whole has profited. . Operating statements . Financial statements B. Business analysis--takes an in depth look at all parts and their individual profitability . Measures used depend upon type of enterprise . Some enterprises affect others C. Samples of summary and analysis from agri-businesses

EDUCATION

01.0206-03 - Code

ANALYZING AGRICULTURAL BUSINESS RECORDS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion using overhead projector or chalkboard to present information. B. Use sample records to show how analysis may help the business. C. Guest speaker.	A. Students take note of new information presented. B. Student discussion of need for analyzing records -- may ask questions of guest speaker. C. Written test.	A. Written quiz.
A. Lecture - discussion to present information. B. Demonstration showing business summaries and analysis.	A. Students take note of new information presented. B. Students may make some calculations from a summary which would be used in an analysis. C. Written Test.	A. Written quiz.

Code - 01.0206.03

AGRICULTURAL

Title - ANALYZING AGRICULTURAL BUSINESS RECORDS

OBJECTIVES BY UNIT	CONTENT
Unit 2 - Determining Business Measures Objective 3 Correctly list a minimum of six measurable factors affecting returns to a business.	A. Factors affecting returns to a business Examples of measurable returns . Size - total units, gross sales, gross assets . Rates of production-units/day or per hour . Labor efficiency - dollar sales per man hour . Capital efficiency - % return per dollar invested . Cost control-prices paid, labor cost per dollar sold . Economic climate-% unemployment, GNP, inflation rate, market prices . Market price - prices received . Uncollected accounts - % of total uncollected . Other B. Measuring factors affecting returns to a business-see above. C. Relative importance of various factors to different types of businesses.
Objective 4 Given the necessary records, correctly calculate amounts for at least five of the factors affecting returns to the business for which you have records.	A. Calculating measures of factors affecting returns to a business. (Teacher should select factors based on local situation) Examples . Rates of production-measured as sales per man hour. $\frac{\text{Monthly sales(\$)}}{\text{monthly man hours}}$ = sales per man hours . Size - total sales per month taken from operating statement - total income per month in a service organization . Market price - $\frac{\text{total sales receipts}}{\text{total sales items}}$ = ave. market price

EDUCATION

01.0206-03 - Code

ANALYZING AGRICULTURAL BUSINESS RECORDS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture-discussion to present information. B. Field trip to business followed by a teacher - student discussion to determine factors affecting returns to that business and their relative importance.	A. Take note of new information. B. During field trip attempt to determine factors affecting returns to the business and how they might be measured. This should be recorded for reference.	A. Evaluate students' notes taken during field trip. B. Written quiz.
A. Group concensus to determine calculation to be used. (Students should know 10 to 15 calculations) B. Demonstration of ways to do calculations. C. Student practice.	A. Participate in group discussion to determine calculations to use. B. Take notes during demonstrations. C. Practice making calculations assigned in class.	A. Evaluate student participation. B. Written test on selected measures.

OBJECTIVES BY UNIT	CONTENT
Objective 5 Correctly calculate at least ten selected business measures used in financial statement analysis, for the business(s) for which you have records.	A. Business measures taken from financial statements . Cash flow . Debt repayment capacity . Ratio of assets to liabilities . Ratio of liabilities to net worth . Net operating margin . Sales volume . Capital turnover . Growth of assets . Return to invested capital . Types of liabilities (long, med., short term) . Fixed expenses . Variable expenses . Other B. Calculations for selected business measures (see references) C. Relative importance of business measures to selected businesses . Service vs. supplies business . Large vs. small business . Single proprietor vs. partnership vs. coop vs. corporation
Unit 3 - Analyzing Business Records Objective 6 Analyze records of two or more businesses in terms of the factors in objective 4 and 5, then recommend, to the instructor's satisfaction, business charges based on your analysis.	A. Financial records of an agriculture business to include: . Balance sheet . Operating statement . Summaries of employee records if not clear on balance sheet or operating statement B. Factors to consider in evaluating records for a budget charge . Time period the records cover . Are the records characteristic of past years . Effect of one charge on entire business . Are records accurate in terms of what is being done in the business . Expected future changes based on current knowledge . Others

EDUCATION

01.0206-03 - Code

ANALYZING AGRICULTURAL BUSINESS RECORDS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture-discussion to present information. B. Field trip(s) to determine measures used by agri-businesses. C. Student practice in calculating measures.	A. Take notes during presentation and field trips.. B. Practice calculations. C. Written test.	A. Written quiz on selected calculations.
A. Lecture-discussion to show students what is contained in the records and to clarify the assignment. B. Students analyze the records individually to meet objective 6. C. After all students have turned in results, group discussions on procedures and budget recommendations.	A. Take note of new material-gain understanding of records used. B. Perform assigned calculations, analyze records and recommend changes. C. Take part in group discussion after assignment is completed.	A. Evaluate completed assignment. B. Evaluate student's notebook for the module.

MODULE OF INSTRUCTION

Title - ANALYZING AGRICULTURAL BUSINESS RECORDS Code - 01.0206-03

RESOURCE MATERIALS

Books:

An Introduction to Agriculture Business and Industry - Weyant-Hoover-McClay
Interstate Printers and Publishers

Ratio Analysis Used to Measure Financial Strength of Agricultural Business Corporations - Burkes,Marshall,Henning - Ohio Agriculture Experiment Station, Wooster, Ohio

Farm Management Handbook - 1972-Cornell University, Economics Dept. (blue section on credit)

Bulletins:

Agricultural Supplies, Business, and Service - Ohio Curriculum Material Service, Ohio State University

Business Procedures - Module #6, Center for Research, Ohio State University

Periodicals:

Yearly Statements (balance sheets) from coops or corporations

Audiovisuals:

The teacner must secure examples of agribusiness balance sheets and operating statements for class use and permission to duplicate them.

MODULE OF INSTRUCTION

Title - SECURING EMPLOYMENT-EMPLOYEE RESPONSIBILITIES Code - 01.0207-01

DESCRIPTION:

One of the principle reasons for occupational education in agriculture is to provide students with skills and ability to locate and keep a job. This module involves the student in preparing job application forms, writing personal resumes' and letters, and interviewing for hypothetical and actual jobs. Students also will be involved in situations where work habits, daily routine and other aspects of jobs will be reviewed.

MAJOR DIVISIONS OR UNITS OF CONTENT	Time Allocations	
	Class	Other
1. Determining Qualifications for Jobs	2	2
2. Applying for a Job	4	17
3. Selecting a Job	1	4
	7	23

Revised January, 1975

MODULE OF INSTRUCTION

Title - SECURING EMPLOYMENT AND EMPLOYEE RESPONSIBILITIES Code - 01.0207-01

OBJECTIVES to be obtained:

Students will develop and demonstrate the effective ability to:

1. List ten regulations from labor laws that apply to the student, concerning; work with hazardous equipment, hours allowed to work, and minimum wage laws.
2. List at least ten characteristics of good employees from information obtained during visits to area agri-businessmen.
3. List at least five sources of job opoortunity information in the local area.
4. Write a letter of application, conforming to literary standards set up by the teacher given a job opening description.
5. Prepare an accurate, up to date, resume of the students qualifications, which exceeds minimum specifications set up by the instructor.
6. Request and secure for the instructor at least two letters of recommendation from previous or current employers or previous teachers.
7. Fill it out accurately, with correct spelling, and to neatness standards acceptable to the instructor given a job application form.
8. Conduct himself during a job interview to the satisfaction of a prospective employer or the instructor.
9. Use the problem solving method to compare two jobs the student qualifies for and justify his selection of one of them to the instructors satisfaction.

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Determining qualifications for jobs. Objective 1 List ten regulations from labor laws that apply to the student, concerning; work with hazardous equipment, hours allowed to work, and minimum wage laws.	A . New York State Labor Laws . Applying to minors . hazardous occupations . hours allowed to work . special provisions for paying student learners. . other . Adults (over 18) . minimum wage laws . other B . Federal labor laws taking precedence over N.Y.S. laws. . Minors . Adults
Objective 2 List at least ten characteristics of good employees from information obtained during visits to area agri-businessmen.	A . Characteristics of good employees in area agri-businesses
Unit 2 - Applying for a Job. Objective 3 List at least five sources of job opportunity information in the local area.	A . Sources of job opportunity information . N.Y.S. Employment Service . Private employment agencies . Newspaper and other classified advertisements . Radio and television . Contacts with former employers . Personal calls to businesses . Friends, relatives and fellow employees . School placement services . Other B . Characteristics of each source of job opportunities. (Refer to An Introduction to Agricultural Business and Industry by Weyant, Hoover, and McClay)

EDUCATION

Module SECURING EMPLOYMENT AND EMPLOYEE RESPONSIBILITIES 01.0207-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture-discussion B. Resource Personnel - Person from labor department. C. Supervised study.	A. Take notes or study handouts concerning regulations. B. List specific laws applying to yourself.	A. Written test.
A. Student questioning during field trips. B. Class discussion	A. During field trips throughout the module students will question employers and develop a list of desirable characteristics of employees.	A. Written test.
A. Lecture-discussions to present information. B. Field trip(s) . Employment agency . Agribusiness with openings	A. Develop list of sources of job opportunity information and determine the characteristics of each during class sessions or field trips. B. Develop list of desirable employee characteristics during field trips to meet Objective #2.	A. Written or oral test

OBJECTIVES BY UNIT	CONTENT
Unit 2 - (continued) Objective 4 Write a letter of application, conforming to literary standards set up by the teacher given a job opening description.	A. Characteristics of letters of application (Refer to pages 58-60 of An Introduction to Agricultural Business and Industry or page 22 of Course of Study in Agricultural Occupations - Kentucky
Objective 5 Prepare an accurate, up to date, resume of the students qualifications, which exceeds minimum specifications set up by the instructor.	A. Characteristics of resume' of qualifications for job application (Refer to Samples - page 26 - Course of Study in Agricultural Occupations - Kentucky Pages 51-56 - An Introduction to Agricultural Business and Industry
Objective 6 Request and secure for the instructor at least two letters of recommendation from previous or current employers or previous teachers.	A. Securing references . Selecting persons to use . Methods of securing letters of recommendations . Securing permission prior to listing a person as a reference. . Thanking persons who provide references.
Objective 7 Fill it out accurately, with correct spelling, and to neatness standards acceptable to the instructor given a job application form.	A. Procedures for filling out application forms. . Promptness . Accuracy . Completeness . Neatness . Returning the form B. Filling out job applications forms. (Use forms in references or obtain forms from local agribusinesses)

EDUCATION

Module SECURING EMPLOYMENT AND EMPLOYEE RESPONSIBILITIES 01.0207-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A . Demonstration B . Student Practice	A. Students will write letters of application using classified ads for job informations.	A. Evaluate letters of applications.
A. Lecture-discussion B. Student Practice	A. Prepare a resume' of personal qualifications for a job.	A. Evaluate students completed resume'.
A. Lecture-discussion B. Student practice	A. Use recommended procedure to request and secure two letters of recommendations for the instructor.	A. Evaluate students procedure used to obtain references (Place letters in students permanent folder)
A. Lecture-discussion B. Student practice	A. Fill out sample job application form(s).	A. Evaluate the form student has filled out in terms of: . Accuracy . Neatness . Completeness . Promptness

OBJECTIVES BY UNIT	CONTENT
Unit 2 (continued) Objective 8 Conduct himself during a job interview to the satisfaction of a prospective employer or the instructor.	A. Preparing for the interview . Finding information about the company . Practicing answers to probable questions B. The job interview . Introduction . Appearance . Punctuality . Answering questions . Asking questions . Ending the interview C. Letter of appreciation after the interview
Unit 3 – Selecting a Job Objective 9 Use the problem solving method to compare two jobs the student qualified for and justify his selection of one of them to the instructors satisfaction.	A. Factors to consider in selecting a job . Qualifications of candidate vs. job requirements . Opportunity of future employment status . Salary and fringe benefits . Working conditions . Attitudes of fellow employees . Location . Other B. Procedure for analyzing jobs . Problem solving method C. Information on jobs for students to analyze . Sample descriptions . Actual decision a studen is making

EDUCATION

Module SECURING EMPLOYMENT AND EMPLOYEE RESPONSIBILITIES 01.0207-01

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture-discussion B. Demonstration C. Role playing D. Resource personal-preferably at business E. Study cards F. Student Practice	A. Students will master answers to interstate study cards on the job interview (work in terms of two) B. Students may take part in or observe an interview in an agribusiness. C. Students should further develop a list of desirable employee traits during visit. D. Students will practice work interviews with each other.	A. Interview students or have cooperating employer(s) interview students and evaluate them using a Checklist of desirable traits.
Lecture-discussion B. Supervised study	A. Use the problem solving method to analyze two jobs either prepared by the instructor or an actual situation.	A. Evaluate the procedure followed by the student in making his decision.

MODULE OF INSTRUCTION

Title - SECURING EMPLOYMENT AND EMPLOYEE RESPONSIBILITIES   Code - 01.0207-01

RESOURCE MATERIALS

A. Books - Youth Opportunity in Agricultural Business. Peary, IMS.
*An Introduction to Agricultural Business and Industry by Weyant, Hoover, McClay - Interstate Printers and Publishers
*Course of Study in Agricultural Occupations 1967 - Department of Agricultural Education, Lexington, Kentucky

B. Bulletins -

U.S. Dept. of Labor. Handbook for Young Workers. Bull. #271 Washington: U.S. Govt., Printing Office.
Ellis, E., A. Cohen, and B. Siegel. How to Fill Out Application Forms. New York: Hobbs, Dorman & Co., Inc. 1966

What Employers Want. Worthy, Science Research Associates, Inc. Chicago, Illinois.

Making the Most of Your Job Interview. New York Life Insurance Co.

*Most recent Federal & State Labor Laws - Dept. of Labor or State Education Department
Education For Agricultural Occupations - 1965 - Gerald R. Fuller - available from Interstate Printers and Publishers.

Choosing an Occupation - Cornell Extension Bulletin S45

C. Periodicals -

D. Audiovisuals -

1. Preparing for Jobs of the 70's. Two Parts: 15 min. and 14 min. 16 mm., b/w film. Guidance Associates, Pleasantville, New York.

2. I Want a Job. 22 min., 16 mm., b/w film. Bureau of Audio-Visual Instruction, P/O. Box 2093, 1312 West Johnson St. Madison, Wisconsin.

* 3. Preparing for the Job Interview - Self instruction flash cards available from Interstate Printers and Publishers.

* Especially useful

MODULE OF INSTRUCTION

Title - BUYING AND SELLING AGRICULTURAL PRODUCTS Code - 01.0208-01

DESCRIPTION:

Buying and selling agricultural products is complicated and basic part of any agricultural supplies and services curriculum. Students will be involved in laboratory situations where they will price and hedge agricultural products, and examine product supply and demands. Student will be expected to outline functions of marketing of certain products and explain vertical integration. Field trips and other visuals are to be used extensively.

MAJOR DIVISION OR UNITS OF CONTENT:	Time Allocations Class	Other
1. Supply and Demand	4	4
2. Functions of Marketing.	2	2
3. Prices and Futures Trading	4	4
4. Margins, Markups and Pricing	2	4
5. Vertical Integration	2	2
	14	16

Revised June 1974

MODULE OF INSTRUCTION

Title - BUYING AND SELLING AGRICULTURAL PRODUCTS Code - 01.0208-01

OBJECTIVES to be obtained:

The student will be able to:

1. Identify the channels of distribution for given products as outlined in class.
2. Identify and list the five steps in marketing, as outlined in class.
3. Identify the types of agricultural markets, as outlined in class, when on a tour of local markets.
4. State the differences between a marketing order and a marketing agreement, and state why orders and agreements are used, as outlined in class.
5. Demonstrate his ability in pricing products, as outlined in class and laboratory, by accurately pricing 10 different items.
6. Given proper materials and 30 minutes of time draw a store floor plan to exhibit merchandising techniques.

Code - 01.0208-0.

Title - BUYING AND SELLING AGRICULTURAL PRODUCTS

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Supply and Demand Objective #1 Identify the channels of distribution for given products as outlined in class	A. Producer to consumer B. Producer to retailer to consumer C. Producer to wholesaler to retailer to consumer D. Producer to agent to wholesaler to retailer to consumer
Unit 2 - Functions of Marketing Objective #2 Identify and list the five steps in marketing, as outlined in class.	A. Production B. Processing C. Jobber or Agent D. Wholesaling E. Retailing
Unit 3 - Prices and Futures Trading Objective #3 Identify the types of agricultural markets, as outlined in class, when on a tour of local markets.	A. Cooperative markets B. Individual markets C. Public markets D. Corporation market E. Roadside market

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Models B. Overhead projection (of the various channels of distribution) C. Chalkboard talk (discussion) D. Resource person - County Agent or representative	A. Construct a model that depicts the various channels of distribution	A. Written test on channels of distribution. Students should score 90% on the test.
A. Filmstrips B. Overhead projection (showing a flowchart from production to consumer) C. Chalkboard talk (discussion) D. Resource person (bring in a jobber or agent if available in local area)	A. Students develop flow charts showing steps in marketing agricultural commodities	A. Orally list or identify, the channels of distribution List five steps in marketing and the types of agricultural markets discussed. Students must score 90% on the test B. Grade the flow charts developed by students
A. Chalkboard talk (discussion) B. Overhead projection (showing the advantages and disadvantages of the types) C. Field trip to as many of the types as possible in local area.	A. Students can list the types of agricultural markets in the area. Have students determine what type of market would be best suited for the various products of the local area. B. Notes on classroom discussion and field trips.	A. Oral or written test on types of agricultural markets in the area. B. Notebook grade

Code - 01.0208-01

Title - BUYING SELLING AGRICULTURAL PRODUCTS

OBJECTIVES BY UNIT	CONTENT
Unit 4 - Margins, Markups and Pricing Objective #4 State the differences between a marketing order and a marketing agreement, and state why orders and agreements are used, as outlined in class.	A. Purpose B. Agricultural Marketing Agreement Act C. Commodities covered D. Items regulated . Quality . Quantity . Standardization . Research and development . Unfair trade practices . Price posting . Market information
Unit 5 - Vertical Integration Objective #5 Demonstrate his ability in pricing products, as outlined in class and laboratory, by **accurately** pricing 10 different items.	A. Discounts . Trade . Quantity . Cash B. Percentages . Decimal . Fraction C. Markups D. Profits

E D U C A T I O N

01.0208-01 - Code

BUYING AND SELLING AGRICULTURAL PRODUCTS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Chalkboard talk (discussion) B. Overhead projection (showing the seven principal items regulated) C. Have students write a short report on marketing orders. D. Resource person associated with marketing cooperatives.	A. Review the purpose of marketing orders and agreements. B. Identify commodities covered. C. Give examples that show how marketing orders protect the producer and consumer.	A. Written test Explain the difference between a marketing order and a marketing agreement. B. List the situations where orders and agreements are used. Students must score 80% on the exam.
A. Resource person (local store owner or manager) to discuss items under content B. Chalkboard talk (discussion) C. Use of bulletin board displays of methods used in discounts, markups, profits.	A. Have students work out typical problems that might **arises** in a store (could get ideas from a local store owner or manager) Have students practice calculations using problems that they set up for themselves.	A. Each student will select an item which could be used on his work experience program and explain how the cost of this item was derived. The way of figuring markups and profits should be included in the explanation.

Code - 01.0208-01

Title - BUYING AND SELLING AGRICULTURAL PRODUCTS

OBJECTIVES BY UNIT	CONTENT
Objective #6 Given proper materials and 30 minutes of time draw a store floor plan to exhibit merchandising techniques.	A. Merchandising . Receiving, marking and storing merchandise . Displaying merchandise . In-store advertising B. Buying . What to buy . When to buy . How to buy . What quantities to buy C. Selling . Personal salesmanship . Why consumers buy . Knowing the merchandise

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Chalkboard talk (discussion) . Covering receiving, marking and storing merchandise . Overhead projection (showing rules for displaying) . Have students construct actual displays in classroom or lab . Resource person (local newspaper representative to discuss the aspects of advertising) . Have students design actual in-store advertisements in classroom or lab. B. Resource person (local store manager to discuss how he knows what, when, and how to buy) . Chalkboard talk (discussion) . explain 1,2,3,4 C. Role playing a personal sales situation. . Chalkboard talk (discussion) . Student develop a paper on a product.	A. Have students design and/or build actual displays and advertisements for products of the local area. B. Have students write a paper or develop a manual on a particular product to demonstrate the importance of knowing the merchandise before trying to sell it.	A. Grade determined on quality of student application of floor plan and exhibit on merchandising techniques.

RESOURCE MATERIALS

A. Books -

Kohls, Marketing of Agricultural Products - MacMillan Pub. Co. - Teacher Reference

Doane's Farm Management Guide

A Story of Milk - N.Y. - N.J. Milk Market Administration

Weyant, Hoover and McClay - An Introduction to Agricultural Business and Industry, The Interstate Printers and Publishers Inc., Danville, Ill. 1966

Roy, Exploring Agribusiness, The Interstate Printers and Publishers, Inc., Danville, Ill., 1967

B. Bulletins -

RESOURCE MATERIALS (cont'd)

C. Periodicals -

Agribusiness Journal - Teacher reference

D. Audiovisuals -

Evolution in Marketing Farm Products - Filmstrip from California State Polytechnic College

MODULE OF INSTRUCTION

Title - FARM, HOME AND GARDEN SUPPLY SALES Code - 01.0208-02

DESCRIPTION:

This module will provide students with a knowledge of the wide variety of miscellaneous small equipment and supplies sold by many agricultural supply firms. While a complete sales technique is not stressed, the overall objective is to make the student better able to perform sales of these miscellaneous items. The module Agricultural Product Salesmanship should be completed, preferably prior to this module. Reference to other modules is made, also. This module can provide a maximum of individual self study rather than shared class activities

DIVISIONS OR UNITS OF CONTENT	Time Allocation Class	Time Allocation Other
1. Miscellaneous	8	12
2. Services Provided	2	4
3. Using Product Catalogs	2	2
	12	18

Revised January, 1975

MODULE OF INSTRUCTION

Title - FARM, HOME AND GARDEN SUPPLY SALES

Code - 01.0208-02

OBJECTIVES to be obtained:

The student will be able to:

1. Complete a "product knowledge" notebook of miscellaneous equipment and supplies.
2. Demonstrate his understanding of the advantages of different forms of a product, such as differences in quality or operating principles.
3. Build a window or floor display of an item of miscellaneous supplies and equipment.
4. Answer a customer service complaint and complete a service work order.
5. Locate product information in sources such as catalogs and specification sheets.

Code - 01.0208-02

AGRICULTURAL

Title - FARM, HOME AND GARDEN SUPPLY SALES

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Miscellaneous Products Carried by Farm, Home and Garden Supply Farms. Objective 1 Complete a "product knowledge" notebook.	Local conditions will determine the most suitable classification of miscellaneous products. A. Kinds of miscellaneous products . Basic hardware . Farm hardware . Lawn and garden tools . Veterinary supplies and equipment . Livestock supplies and equipment . Horse tack . Pet supplies and equipment . Outdoor power equipment . Tires, batteries, oils and accessories . Lumber . Builder's supply materials . Outdoor living equipment . Recreational equipment . Appliances . Shoes, gloves and clothing . Other
Objective 2 Demonstrate his understanding of advantages of different forms of a product such as differences in quality or operating principles.	The teacher and/or the students will have to determine the important items in the local area which the prospective employee will need **to take the** advantages of the various product forms. Some examples are: A. Lawn mowers . Reel . Rotary . Flail B. Garden tractors . Size . Accessories C. Fencing . Types and uses D. Tools . Quality in fit, finish, strength E. Roofing . Types . Advantages of each type . Costs of each type

EDUCATION

01.0208-02 - Code

FARM, HOME AND GARDEN SUPPLY SALES - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Field trip to a large general, home and garden supply center to acquaint students with the diversity of miscellaneous products handled. B. Display sales catalogs and product specification sheets. C. Class discussion following field trip.	A. Each student develop a "product knowledge" notebook made up of representative manufacturer's specification sheets and sales brochures for each category of miscellaneous supplies and equipment of local importance.	A. Evaluate the student's "product knowledge" notebook.
A. Lecture - discussion B. Role playing conducted by teacher C. Students assigned to study a product using their "product knowledge" notebook or visiting a local firm	A. Role playing in which students demonstrate the advantages of a particular form of the product OR B. Students present oral "demonstration - speech" showing advantages of a particular product form.	A. Evaluate the role play B. Evaluate oral presentation

OBJECTIVES BY UNIT	CONTENT
Objective 3 Build a window or floor display of an item of miscellaneous supplies or equipment.	A. Principles of merchandise display (probably a review) . Refer to Module 01.0205-01 - Display and Advertisement of Agricultural Products
Unit 2 - Services Provided by Farm, Home and Garden Supply Firms Objective 4 Answer a customer service complaint and fill out a service work order.	A. Types of services provided . Equipment repair . Appliance installation . Chemical application . Others B. Telephone communication (probably review of learnings from module - Oral Communications) C. Service work orders . Purpose . How to fillout
Unit 3 - Using Product Catalogs - Objective 5 Locate product information in sources such as catalogs and specification sheets.	A. Kinds of information found in product catalogs B. Use of indexes C. Use of identification symbols D. Reasons why sales persons should be able to locate product information quickly - . Determine if item is in stock . Determine location of item in store . Determine price . Provide further information, data or specifications . Facilitate re-order if out-of-stock . Offer customer a substitute for an out-of-stock item . Make special order with shipment direct to customer

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion B. Individual study	A. Each student create and construct a window or floor display, either in school or at a local firm.	A. Evaluate the display
A. Class discussion B. Field trip to a local Farm, Home and Garden Supply firm C. Role play	A. In a role play situation, preferably using a telephone each student, acting as a clerk in a farm and home store, will handle a customer complaint and complete a work order for some type of service to be performed by the firm.	A. Evaluate the role play B. Written or oral test
A. Lecture - demonstration B. Display and make available for student use as many catalogs and specification sheets, parts books, and the like as possible. Current books are expensive and may be difficult to obtain, but obsolete copies can probably be easily acquired and are just as good for class use. C. Conduct student role play D. Class discussion	A. Role playing in which students, acting as salesmen, solve practical problems relating to using catalogs and other product information sources. Use should be made of the "product knowledge" notebook already completed.	A. Evaluate role play B. Written test

MODULE OF INSTRUCTION

Title - FARM, HOME AND GARDEN SUPPLY SALES Code - 01.0208-02

RESOURCE MATERIALS

A. BULLETINS -

Catalogs, brochures, specification sheets, product information sheets, and the like from manufacturers of miscellaneous supplies and equipment.

B. PERIODICALS -

Home and Garden Supply Merchandiser, Miller Publishing Co., Minneapolis, Minn.

MODULE OF INSTRUCTION

Title - SALES OF PETROLEUM PRODUCTS AND ACCESSORIES Code - 01.0210-01

DESCRIPTION:

Students with career aspirations in the agricultural products sales field should complete this module. The student will demonstrate knowledge and appropriate use of fuels, tires, and accessories used on the farm and in related enterprises. Students will also become involved with determining and providing correct lubricants, greases, and oils under simulated and actual situations. Considerable time will be spent in field activity concerning the application of sales techniques and practices.

MAJOR DIVISION OR UNITS OF CONTENT	Time Allocations	
	Class	Other
1. Tractor and equipment fuel	4	2
2. Oils and other lubricants	2	6
3. Tires for farm vehicles	2	3
4. Accessories	2	3
5. Sales techniques	2	4
	12	18

Revised August 1975

MODULE OF INSTRUCTION

Title - SALES OF PETROLEUM PRODUCTS AND ACCESSORIES Code - 01.0210-01

OBJECTIVES to be obtained:

The student will be able to:

1. Using manufacturers' specifications, select the proper fuels for given power units of various designs, as evidenced by achieving a score of 100% on a written or oral examination
2. Recommend safe storage facilities for fuels and lubricants given a set of existing conditions at the site and the fuels and lubricants to be stored
3. Using manufacturers' specifications, select the proper lubricant for a particular given application as evidenced by achieving a score of 100% on a written or oral test administered by the teacher
4. Using manufacturers' specifications, select the proper tires for given pieces of equipment and make correct recommendations for inflation pressure and ballast. This will be expressed to the teacher by a written or oral examination.
5. Demonstrate techniques of selling merchandise in the petro-chemical field to the members of the class. The selling technique will be reviewed by the other class members.

Code - 01.0210-01

Title - SALES OF PETROLEUM PRODUCTS AND ACCESSORIES

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Tractor and equipment fuel	
Objective 1 Using manufacturers' specifications, select the proper fuels for given power units of various designs, as evidenced by achieving a score of 100% on a written or oral examination	A. Gasoline B. Diesel fuel C. LP-Gas D. Gasoline additives
Objective 2 Recommend safe storage facilities for fuels and lubricants given a set of existing conditions at the site and the fuels and lubricants to be stored	A. Gasoline B. Diesel fuel C. LP-Gas
	A. Gear oils B. Lubricating greases C. Hydraulic oils
Unit 2 - Oils and other lubricants Objective 3 Using manufacturers' specifications, select the proper lubricant for a particular given application as evidenced by achieving a score of 100% on a written or oral test administered by the teacher	A. Functions of lubricating oil B. Viscosity C. API types of oils D. Additives

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Filmstrips B. Display of various products C. Develop in class a chart comparing different fuels D. Role-playing to simulate selling properly selected products to farmer customer	A. Field trip to local petroleum products dealer to determine products handled, storage and delivery facilities, and methods of selling, using field trip report form prepared by instructor for recording data on grades, volumes sold, etc.	A. When given the specification booklet for a power unit the student will be able to recite the proper fuel for that unit to 100% accuracy.
A. Filmstrip B. Class discussion C. Role-play situations involving farmer customer with salesman to determine proper storage D. Make a plan for proper storage under certain given conditions	A. Field trip to a site where underground storage is being installed B. Field trips to existing situations demonstrating both desirable and undesirable storage, students to list good and bad features observed C. Ex-distance from buildings, depth of placement	A. The student will be able to recite to the instructor the proper and safe method of storing fuels in both the field and workshop areas
A. Class discussion B. Review of tractor operator's manuals to determine recommended oils C. Samples of oils of different types and viscosities D. Role-play situations between customer and salesman E. Filmstrip F. Engine parts worn due to improper lubrication displayed	A. Field trip combined with that listed for Unit 3 B. Ability to select proper gear oil, lubricating grease or hydraulic oil for particular application C. Ability to sell gear oil, lubricating grease, and hydraulic oil to customers	
A. Class discussion B. Review of tractor operator's manuals to determine recommended oils C. Samples of oils of different types and viscosities D. Role-play situations between customer and salesman E. Filmstrip F. Engine parts worn due to improper lubrication displayed	A. Field trip to petroleum products dealer to determine motor lubricating oils handled, using report form prepared by teacher to include space for recording types, viscosities, container sizes, volumes handled, etc.	A. When given the specification booklet or lubrication chart for a piece of machinery a student will be able to recite the correct lubricant for that machine 100% of the time

Code - 01.0210-01

AGRICULTURAL

Title - SALES OF PETROLEUM PRODUCTS AND ACCESSORIES

OBJECTIVES BY UNIT	CONTENT
Unit 3 - Tires for farm vehicles Objective 4 Using manufacturers' specifications, select the proper tires for given pieces of equipment and make correct recommendations for inflation pressure and ballast. This will be expressed to the teacher by a written or oral examination.	A. Types and applications B. Tire sizes C. Inflation D. Ballast
Unit 4 - Accessories	A. Anti-freeze B. Batteries C. Oil filters D. Vee-belts E. Others
Unit 5 - Sales techniques Objective 5 Demonstrate techniques of selling merchandise in the petro-chemical field to the members of the class. The selling technique will be reviewed by the other class members.	A. One-to-one contact with customer . Knowledge of products . proper products for various jobs . Price of products B. Telephone conversations for information and taking orders C. Appearance of salesman D. Voice modulation of salesman

EDUCATION

01.0210-01 - Code

SALES OF PETROLEUM PRODUCTS AND ACCESSORIES - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion B. Class review of tire dealer catalogs	A. Field trip to tire sales firm to determine tires handled, services performed B. Lab or field trip to inspect tires for wear, students load tire with ballast or calcium chloride in water C. Ability to sell replacement tires to customers D. Ability to select proper tire, inflation pressure and ballast for particular application	A. The student will be able to interpret the specification booklet and recite the proper tire sizes and ballast needed for a piece of machinery to 100% accuracy
A. Class discussion B. Cut-away models of oil filters, vee-belts, batteries C. Charts indicating proper replacement filter or vee-belt for farm tractors and power units	A. Field trip to local firm selling accessories listed, students record items sold on prepared field trip report form B. Ability to sell accessories to petroleum products to customers	
A. Demonstration of proper sales techniques by instructor or resource person B. Field trip to Agway or other petroleum sales company. Talk with salesman about selling techniques	A. Each student will record in a notebook tips observed on field trips of good selling techniques B. Each student will have the opportunity, through role-playing, to sell products to another member of the class	A. Each student will be evaluated on his ability to sell products to a classmate. The rest of the class will have an opportunity to criticize the sales performance.

MODULE OF INSTRUCTION

Title - SALES OF PETROLEUM PRODUCTS AND ACCESSORIES Code - 01.0210-01

RESOURCE MATERIALS

Books -

1. Selecting and Storing Tractor Fuels and Lubricants, Southern Association of Agricultural Engineering and Vocational Agriculture, Athens, Georgia
2. LP-Gas on the Farm, National LP-Gas Council
3. Farm Tire Handbook, Goodyear

Audiovisuals -

1. Selecting and Storing Tractor Fuels and Lubricants, Southern Association of Agricultural Engineering and Vocational Agriculture, Athens, Georgia, color filmstrip

MODULE OF INSTRUCTION

Title - ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES

Code - 01.0211-01

DESCRIPTION:

Students will study business organization patterns as they have developed in America. Field trips to the different types of businesses and to a brokerage firm will be included. Students will develop basic plans for initiating each major type of business and record functions of management and other employees. Through stimulated activity, students will be involved in activities of a stock broker and stock holder.

MAJOR DIVISION OR UNITS OF CONTEST:	Time Allocations	
	Class	Other
1. American profit system-functions and purposes	4	3
2. Types of business organizations	4	8
3. Stock Market Operations	2	5
4. Resources Needed to Establish a Business	2	2
	12	18

Revised June, 1974

MODULE OF INSTRUCTION

Title - ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES

Code - 01.0211-01

OBJECTIVES to be obtained:

The student will be able to:

1. Gather materials in (or add to) a notebook designed to aid the student studying agricultural supplies and services. This notebook material will be designated as Organizational Patterns and be completed to the satisfaction of the instructor.
2. Describe his position as both a worker and a consumer in the profit system in an essay or oral test to the satisfaction of the teacher.
3. When given a matching test of the 4 types of business organizations and the characteristics of each, the student will match the characteristics with the proper type of business organization with 90% accuracy.
4. Orally list the characteristics of large and small businesses as presented with 80% accuracy.
5. When given graph paper, 10 stock quotations from a newspaper, and 10 stock dividends, plot the relative positions of the given stocks, calculate the stock quotations and dividends with 90% accuracy.
6. Outline the resources needed to establish and operate an agricultural business as presented during a two hour supervised study session to the satisfaction of the teacher.

Code - 01.0211-01

Title - ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES

OBJECTIVES BY UNIT	CONTENT
Unit 1 - American profit system - functions and purposes Objective #1 Gather materials in (or add to) a notebook designed to aid the student studying agricultural supplies and services. This notebook material will be designated as Organizational Patterns and be completed to the satisfaction of the instructor. Objective #2 Describe his position as both a worker and a consumer in the profit system in an essay or oral test to the satisfaction of the teacher.	A. Discussion of Capitalism . Elements of Capitalism . private ownership . profit making . competition . Compare to other systems B. Individual's role in the system . Owner . Manager . Worker . Consumer C. Functions . Marketing . Processing and packaging . Retailing and wholesaling . Storing and transporting D. Purposes . Sell goods . Buy agricultural products . Provide services . Profit
Unit 2 - Types of business organizations Objective #3 When given a matching test of the 4 types of business organizations and the characteristics of each, the student will match the characteristics with the proper type of business organization with 90% accuracy. Objective #4 Orally list the characteristics of large and small businesses as presented with 80% accuracy.	A. Compare the ownership, control, management, returns, legal aspects, and liability of: . Sole proprietorship . Partnership . Cooperatives . Corporations B. Compare large and small businesses - . Responsibility of manager . Duties of employees . Degree of specialization . department store . chain store . branch store

E D U C A T I O N

01.0211-01 - Code

ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion - . Use chalkboard . Use overhead projector B. Guest speakers - . Invite local teacher of social studies to discuss systems C. Class discussion - . Draw on personal experiences of students D. Class discussion - . Lecture E. Class discussion - . Lecture	A. Students will spend time in a supervised study situation preparing a paper on: The American Profit System - Functions & Purposes	A. Notebook will be graded for its content, the neatness of the total notebook, and its organization. B. The student will accurately describe his position as a worker and consumer in the profit system. This can be either a written or oral presentation.
A. Class discussion - . Use chalkboard . Use overhead projector . Use "Four Methods of Doing Business" - Game and Students Manual B. Filmstrip C. Resource Person - Example - manager of a local business Class discussion - to compare and contrast the businesses seen on the field trip.	A. Take a field trip to each of the four types of businesses (if locally available) and have the manager describe the business organization, purpose and function.	A. A written test when characteristics and types of business organizations are matched. B. Oral test on the characteristics of small and large businesses.

Code - 01.0211-01

AGRICULTURAL

Title - ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES

OBJECTIVES BY UNIT	CONTENT
Unit 3 - Stock Market Operations Objective #5 When given graph paper, 10 stock quotations from a newspaper, and 10 stock dividends, plot the relative positions of the given stocks, calculate the stock quotations and dividends with 90% accuracy.	A. Dicussion of the stock market B. Understanding stocks and stock quotations . Common stock . Preferred stock . Bonds C. Understanding stock dividends
Unit 4 - Resources Needed to Establish a Business Objective #6 Outline the resources needed to establish and operate an agricultural business as presented during a two hour supervised study session to the satisfaction of the teacher.	A. Land and buildings . Store and office . Other facilities B. Personnel . Managers, foreman . Sales persons . Laborers C. Capital . Long term . Operating D. Goods or services . Products to sell . Services to provide

ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Resource person . Local stock broker B. Film - "The Stock Exchange and Investing" C. Field trip	A. Students will take a field trip to a local brokerage firm to view the business, see a ticker tape in motion and learn how to read stock quotations.	A. Evaluate graphed work after it has been completed, using accuracy as the main marking point. Neatness of work will also be a consideration.
A. Panel of speakers from different types of business organizations to discuss and identify the resources needed.	A. Students will spend time in a supervised study situation to prepare an outline (base on the panel discussion) of the resources needed to start a business.	A. The outline, which will be the final part of the student notebook, will be graded as to its content in relation to the business he wants to establish.

MODULE OF INSTRUCTION

Title - ORGANIZATIONAL PATTERNS IN AGRICULTURAL BUSINESSES   Code - 01.0211-01

RESOURCE MATERIALS

A. Books -

Weyant, Hoover, McClay. An Introduction to Agricultural Business and Industry. Interstate Printers and Publishers, 1966. see P. 139-185

Roy, Ewell Paul. Exploring Agribusiness. Interstate Printers and Publishers, 1967. see P. 161-176

Four Methods of Doing Business, Instructional Materials Service, Div. of Agr. Edu., Cornell Univ.
- Books for Students
- Teacher Guide
- Game

B. Bulletins -

Cooperatives in Agribusiness, Farmer Cooperative Service U.S.D.A. Ed. Cir. #33, Washington, D. C. 1964.

C. Audiovisuals -

Filmstrip - "Co-ops" produced by VEP

Film - "The Stock Exchange and Investing" 28 min. Sterling Movies, Inc., 43 W. 61st. St., N.Y., N.Y.

MODULE OF INSTRUCTION

Title - COOPERATIVES IN AGRICULTURE Code - 01.0211-02

DESCRIPTION:

Farmer cooperatives are an extremely important segment of agri-business in the United States. In this module students will study the kinds of farmer cooperatives, how they are organized to conduct business, their uniqueness as business concerns, and the potential benefits to members and society of cooperative business. The local community will serve as a valuable laboratory for student exploration of cooperatives. A number of student activities are recommended with views toward future employment in a cooperative or future membership in cooperatives.

DIVISIONS OR UNITS OF CONTENT	Time Allocation	
	Class	Other
1. Basic Cooperative Features	2	4
2. Benefits of Farmer Cooperatives	1	4
3. Development of Farmer Cooperatives	1	1
4. Business Nature of Farmer Cooperatives	8	9
	12	18

Revised June, 1974

MODULE OF INSTRUCTION

Title - COOPERATIVES IN AGRICULTURE

Code - 01.0211-02

OBJECTIVES to be obtained:

The student will be able to:

1. Identify the basic features of farmer cooperatives by participating in a survey of local cooperative businesses.
2. List the potential benefits of cooperative business and survey the real benefits felt by the local community.
3. Recite the major stages in the development of U.S. Farmer cooperatives and of local cooperatives.
4. Identify the functions of and major products handled by marketing, production supply, and service cooperatives.
5. Recite from memory the various methods used to finance farmer cooperatives, in particular those used by local cooperatives.
6. Identify the unique problems of management of farmer cooperatives.

Code - 01.0211-02

AGRICULTURAL

Title - COOPERATIVES IN AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Unit #1 - Basic Cooperative Features Objective #1 - The student will identify the basic features of farmer cooperatives by participating in a survey of local cooperative businesses.	A. What is a cooperative? . Business . Membership organization B. Basic principles of cooperatives . Operations at cost . patronage refunds . Democratic control by members . usually one man-one vote . vote on basis of stock owned . vote on basis of business done . Limited returns on capital C. Definitions of cooperatives D. Classifications of farmer cooperatives . By size - ranges from very small to very large . By area served . local coops . regional associations . national associations . By type of membership . local . centralized . federated . mixed . By legal status . incorporated . unincorporated . stock . non-stock . By type of business . marketing . production supply . business services . combinations E. Cooperatives compared to: . Sole proprietorship . Partnership . Corporation

EDUCATION

01.0211-02 - Code

COOPERATIVES IN AGRICULTURE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion B. Reading assignments in FCS bulletins C. Student survey of local community Suggestions: A. Make reference to local or other easily recognized cooperatives throughout the unit. B. Start with what is known and progress toward the unknown. Perhaps before any class discussion begins the students should identify those local firms which are cooperatives. Then the question, "What is different about them as compared to non-coop businesses?"	A. Students identify those local agri-businesses which are coops. B. Students survey the local coops to determine the particular way in which each exhibits the basic principles of cooperatives. C. Students classify each local coop according to each system outlined.	A. Written test (based on student survey made and reported to the class). B. Evaluate student classification of coops.

OBJECTIVES BY UNIT	CONTENT
Unit 2 - Benefits of Farmer Cooperatives Objective #2 The student will be able to list the potential benefits of cooperative business and survey the real benefits felt by the local community.	A. Benefits to members . Improve . Improve farming itself . Increase personal capabilities B. Contributions to the community . Added income of farmers spent locally . Employees of cooperatives spend paychecks locally. . Stimulate related business . Provide funds and leadership to community activities C. Benefit the general public . Improve general economy . Quality of product . Can result in lower consumer cost D. Benefit foreign countries . Training of foreign coop leaders . Direct aid to foreign coops
Unit 3 - Development of Farmer Cooperatives Objectives #3 The student will recite the major stages in the development of U.S. farmer cooperatives and study the history of local coops.	Parts 1-6 are based on Bulletin Reprint 4, Agricultural Cooperation, Pioneer to Modern from the Farmer Cooperative Service A. Farmers Experiment With the Idea B. Encouragement by General Farm Organizations C. Many Cooperatives Organized D. Commodity Marketing Expands E. Sound Business Emphasized F. Adjustments to Change G. History and development of farmer cooperatives in the local community

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion B. Reading assignments C. Resource persons as local coop directors or members and local persons not directly associated with a coop who could discuss the benefits of coops. D. Student survey.	A. Students survey members of local coops to determine how beneficial the coops are to the members. B. Students determine what benefits the local community receives from the existence of local coops. C. FFA chapter consider benefits to be derived from a cooperative activity such as purchasing some item of supply for members, or the chapter becoming a member of a local coop. D. A panel discussion by students to be given to local coop and especially non-coop groups on the benefits of coops and their legitimate place in private enterprise.	A. Written test B. Evaluate student survey C. Evaluate oral presentations made in panel discussions.
A. Lecture B. Reading assignments C. Resource persons as local people familiar with history of coops in area. D. Student research on local coop history.	A. Students interview members of local coops to obtain history. B. Study local records in libraries, court houses to obtain additional history. C. Students write short papers or prepare oral presentations, relating local coop history to the stages in the development of U.S. farmer cooperatives in general.	A. Evaluate student oral reports. B. A local coop might sponsor a contest to determine the best report, publicize the activity.

Code - 01.0211-02

Title - COOPERATIVES IN AGRICULTURE

AGRICULTURAL

OBJECTIVES BY UNIT	CONTENT
Unit 4 - Business Nature of Farmer Cooperatives Objective #4 - The student will identify the functions of and products handled by marketing, production supply, and service cooperatives.	A. Marketing coops . Function - sell members farm products . Major products marketed by coops . Examples of marketing coops . Important trends B. Production supply (or purchasing) coops . Function - obtain supplies for members . Major inputs supplied by coops . Examples of production supply coops . Important trends C. Service coops . Function - provide business services to members. . Major kinds of services provided by coops . Examples of service coops . Important trends
Objective #5. The student will be able to recite from memory the various methods of financing farmer cooperatives, in particular those used by local coops.	A. Principles of financing cooperatives Roy, pg. 319, 2nd ed. B. Determining capital needs C. Membership or equity capital . Sources . stock cooperatives . non-stock cooperatives . Operation of revolving fund plans D. Borrowed capital or credit . Sources . Operation of Banks for Cooperatives

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion B. Reading assignments C. Use of overhead projections to present basic statistics D. Display brand names, logos, packages, literature, annual reports and other materials from as many coops as possible. E. Local community survey by students.	A. Students classify each coop in the local area as marketing, supply, service or mixed. B. Students determine major products marketed, supplies and services provided by local coops. A display might be prepared and exhibited in school or some community location. C. FFA chapter members consider activities they might initiate in regard to cooperative marketing, purchasing or service.	A. Evaluate student survey and classification activity. B. Written test.
A. Lecture to explain principles B. Discussion to review determination of capital needs. C. Lecture-discussion of sources of capital D. Resource persons as local coop director(s) or managers. E. Display samples or specimens of financial documents, as stock certificates, membership certificates, certificates of indebtedness, etc. F. Overhead projections to illustrate operation of revolving fund plans.	Students study local coops to determine methods of financing used.	Recite the methods of financing local and regional coops.

Code - 01.0211-02

AGRICULTURAL

Title - COOPERATIVES IN AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Unit 4 - Objective #6. The student will be able to identify the unique problems of management of farmer cooperatives.	A . Members and cooperative management . Powers of members . Responsibilities of members B . Directors and cooperative management . Powers of directors . Responsibilities of directors . Relationship to manager C . The Manager . Power . Responsibilities . Qualifications of a good coop manager . Relationship to members . Relationship to directors . Relationship to employees D . Need for hired employees to understand coop principles - member - users own the business - unique business arrangement.

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture - discussion B. Resource persons - local coop directors and managers C. Conduct role play.	Students engage in role play involving typical problems arising in coop management. For example, a director chastises an employee, the employee complains to the manager, what does the manager do? Consider the respective powers and responsibilities of members, directors and managers.	A. Evaluate role play. B. Written test - objective, listing, or essay would all be applicable.

MODULE OF INSTRUCTION

Title - COOPERATIVES IN AGRICULTURE Code - 01.0211-02

RESOURCE MATERIALS

Books - Roy, Ewell P., Cooperatives: Today and Tomorrow, 2nd ed., The Interstate Printers and Publishers, Danville, Illinois.

Principles of Agricultural Finance, Farm Credit Banks of Springfield

Bulletins -

Guide for Teaching Farmer Cooperation, American Institute of Cooperation, Washington, D.C.

Cooperative Corporations Law, Circular 903, State of New York. Department of Agriculture and Markets, Albany, New York.

Farmer Cooperative Service, Washington, D.C. 20250
Many publications available, recommended are:

Farmer Cooperatives In the United States, Bulletin 1
Farmer Cooperatives - Farm Business Tools, Agricultural Information Bulletin 275
Basic Cooperative Features, Bulletin Reprint 3
Agricultural Cooperation, Pioneer to Modern, Bulletin Reprint 4
Cooperatives In Agri-business, Educational Circular 33
How to Start A Cooperative, Educational Circular 18
Financing Farmer Cooperatives, Educational Circular 5
Managing Farmer Cooperatives, Education Circular 17
What Are Patronage Refunds? Information 34
Cooperatives: Now and In the Future, Information 62
Statistics of Farmer Cooperatives, annual publication

Periodicals - "News for Farmer Cooperatives" - Farmer Cooperative Service, USDA, Washington, D.C. 20250
"Dairylea News" - Dairylea Cooperative, Inc.
"Agway Cooperator" - Agway, Inc., Syracuse, N.Y.

Audiovisuals - slides - "The American Private Enterprise System" American Institute of Cooperation, Washington, D.C.
filmstrip - Cooperative Organizations - IMS, Cornell University
movie - An A for the BC Way - Farm Credit System

MODULE OF INSTRUCTION

Title - **FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES** Code - 01.0211-03

DESCRIPTION:

This module is concerned with problems in financing agricultural businesses and the use of customer credit as a business management tool. Students will learn the sources and types of capital and credit, how to apply for a loan, to compute the cost of a loan and the repayment ability of a business. They will learn the problems in using customer credit and how to record credit sales, the accounting needed and some ways of collecting credit accounts. Community resources as financial institutions and agribusiness firms are an invaluable aid to utilizing this module.

MAJOR DIVISIONS OR UNITS OF CONTENT	Time Allocations	
	Class	Other
1. Financing Agricultural Businesses	12	12
2. Customer Credit	2	4
	14	16

Revised June, 1974

MODULE OF INSTRUCTION

Title - FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES

Code - 01.0211-03

OBJECTIVES to be obtained:

The student will be able to:

1. Estimate capital and credit needs for agricultural businesses.
2. Select appropriate types and sources of credit to meet different needs.
3. Compute simple interest, discount interest and installment loan costs.
4. Make application for a business loan.
5. Determine the debt repayment ability of an agricultural business.
6. Explain the customer credit policy of the business to a customer, including the need for prompt and regular payment on the credit account.

Code - 01.0211-03

Title - FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Financing Agricultural Businesses Objective 1 Estimate capital and credit needs for an agricultural business.	A.The meaning of capital B.Capital needs of agriculture C.Characteristics of agriculture affecting finance D.Sources of capital .Savings .Family arrangements .Renting .Incorporation .Purchase contracts .Credit E.Types of capital .Fixed .Operating F.Estimating capital needs .Type of business .Size of business .Consider both fixed and operating G.Estimating credit needs .Non-credit sources .Total capital needed .Credit necessary
Objective 2 Select appropriate types and sources of credit to meet different needs.	A.Types or classifications of credit .Use .Time .Security .Lender B. Sources of credit in agriculture .Commercial banks .Farm Credit Service .Farmer's Home Administration .Life insurance companies .Merchants,dealers .Individuals C.Types of credit and terms available from each source D.Selecting a lender .Type of credit offered .Terms available .Services provided .Reputation .Other

EDUCATION

01.0211-03 - Code

FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A.Class discussion B.Overhead projections C.film-"Credit Where Credit Is Due" D.Field trip to a local business in agriculture,manager explain capital requirements E.Refer to module-Organizational Patterns In Agricultural Business	Students prepare plans for starting an agricultural business including an estimate of capital and credit needs. Small group, team, or individual project as desired.	A.Evaluate accuracy of estimates made for each business. B.Written test.
A.Class discussion B.Overhead projections C.Resource person(s) from local credit agency	A.Students make a community survey to determine the sources of credit available and information about their services and loan programs. B.Students relate to estimates of credit needs previously made by selecting credit sources which can meet the various needs established.	A .Evaluate students' financial plans. B .Written or oral test.

Code - 01.0211-03

AGRICULTURAL

Title - FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES

OBJECTIVES BY UNIT	CONTENT
Unit 1 Objective 3 Compute simple interest, discount interest and installment loan costs.	A. Meaning of interest B. Factors affecting interest rates .Supply and demand for money .Degree of risk .Purpose of loan .Size of loan C. Computing simple interest D. Computing discount E. Installment credit F. Comparing credit costs G. "Truth-In-Lending" Law and its effects.
Objective 4 Make application for a business loan	A. Factors considered by lenders in reviewing loan applications .The individual borrower .reputation .experience and ability .attitude toward debt .others .The business .financial condition .physical condition .repayment ability .available collateral .others B. Information needed when applying for a loan .Purpose of loan .Amount needed .Business operating condition-operating statement or income and expense statement .Business financial position-financial statement or net worth statement C. Procedure in applying for a loan .Visit credit agencies and discuss needs informally .Complete statements for the credit agency if asked .A report will be made by the agency .Complete Loan Application forms .Approval or disapproval by the agency .Sign necessary credit instruments and receive money

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A.Overhead projections B.Class discussions C.Student practice in problem solving	A.Students compute the true annual interest rates charged locally B.Students determine cash and other discounts offered by local agricultural businesses C.Using local credit sources and their terms,students determine the least costly loan for various given situations.	A.Problem-solving tests. B.Evaluate credit cost projects done locally.
A.Class discussion B.Visit a lending agency and have the manager discuss application requirements and procedures or ask the credit representative to visit the class. C.Use overhead projections D.Use sample statements and documents for student practice	A.Students complete specimen statements and application forms B.Role play involving students as borrowers and lenders in loan application situations C.Students organize a loan fund for members thru the FFA Chapter, including application forms and procedures.	A.Evaluate completed forms B.Evaluate role play C.Written test

Code - 01.0211-03

Title - FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES

OBJECTIVES BY UNIT	CONTENT
Unit 1 Objective 5 Determine the debt repayment ability of an agricultural business	A .Rules for repayment .Deal with specialists .Avoid undue optimism in length of loan .Arrange payment time to fall when receipts are up .Be sure there is a "pay early" clause .Simplify the repayment schedule .Keep an accurate record of payment B .Repayment of long term loans .Decreasing payment plan .Equal payment plan C .Repayment of short term loans .Lump sum .Amortized D .Computation of repayment ability .Cash available for debt payment .Repayment terms .cost .time .Use of factors in determining capacity of debt *refer to "Farm Management Handbook", Cornell Ag.Ed. publication

01.0211-03 - Code

FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussions B. Overhead projections C. Resource person D. Problem-solving situations	Students work out problems involving loan applications, determine the repayment ability of the borrower.	Evaluate problem solving.

Title - FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES

OBJECTIVES BY UNIT	CONTENT
Unit 2 - Customer Credit Objective 6 Explain the customer credit policy of the business to a customer, including the need for prompt and regular payments on the credit account.	A. All businesses use credit B. Credit is a business management credit C. Advantages of providing customer credit . Increase in sales volume . Increase in steady customers . Can create good customer relations-trust is basis of credit . Aids advertising D. Disadvantages of providing customer credit . Increases needed working capital . Increases operating costs . Can cause poor customer relations E. Types of customer credit . Charge accounts . Installment sales . Revolving charge account . Budget account . Others F. Handling customer credit . Investigate customer as a credit risk . Keep up-to-date records of credit sales . Charges for late payment and services provided G. Collecting from credit customers . Keep customer informed of his account . Payment requests-continually more forceful . Suspend credit . Use telephone . Send out a collector . Use legal action . Repossess and resell goods

01.0211-03 - Code

FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A.Class discussion B.Resource person-a local business such as a feed store, farm supply store,etc., may be willing to discuss their customer credit policy and the related problems C.Display examples of customer identification cards,accounting forms used in recording customer credit,and similar materials D.Directed student practice in making sales on credit,up-dating customer credit accounts and collecting from credit customers.	A.Survey the customer credit policies used in local agricultural businesses. B.Obtain examples of letters used to inform credit customers of their account situation and requests for payment. C.Role play involving students as clerk-salesmen and customers in credit sales problems.Record credit sale properly.Follow through in bookkeeping practices required in credit sales. D.Role play situations where a personal request for payment of an overdue account is made. E.Each student plan a customer credit policy,including terms, methods of accounting and requesting payment,for a given business.	A.Evaluate role play B.Written test C.Evaluate recommended customer credit policy and procedures.

MODULE OF INSTRUCTION

Title - FINANCE AND CREDIT IN AGRICULTURAL BUSINESSES

Code - 01.0211-03

RESOURCE MATERIALS

Books:

Roy, Exploring Agribusiness, The Interstate Printers and Publishers, Danville, Illinois
*Principles of Agricultural Finance, Farm Credit Banks of Springfield - IMS, Cornell U.
Murray and Nelson, Agricultural Finance, Iowa State
Farm Management Handbook - Ag. Ec. Dept., Cornell U.

Bulletins:

*available from IMS, Cornell U., includes visual aids, teaching suggestions, recommended films, bulletins and brochures.

MODULE OF INSTRUCTION

Title - INSURANCE FOR AGRICULTURAL BUSINESSES Code - 01.0211-14

DESCRIPTION:

Students will study and prepare insurance programs for agricultural businesses common to their local situation. Field trips to agencies, farms and businesses will be planned, conducted and evaluated by students in relation to types of coverage needed, planned and available. State insurance regulations will be studied with students preparing materials for class and community programs.

MAJOR DIVISION OR UNITS OF CONTENT:	Time Allocations	
	Class	Other
1. Insurance for Producers of Agricultural Products	1	2
2. Life, Health and Accident Insurance	4	4
3. Workmen's Compensation	2	2
4. Other Insurance	5	10
	12	18

INSURANCE FOR AGRICULTURAL BUSINESS

Code 01.0211-04

OBJECTIVES TO BE ATTAINED:

The student will be able to:

1. Using notes and references, plan an insurance program for a given hypothetical or actual agricultural business which coincides with the teacher's expectations for that business.

2. Using notes and references, plan a life insurance program for himself which coincides with the teacher's expectations.

3. List employee and employer benefits of workmens' compensation insurance.

4. Prepare an insurance program for ones own or a given hypothetical business.

Code - 01.0211-04

Title - INSURANCE FOR AGRICULTURAL BUSINESS

OBJECTIVES BY UNIT	CONTENT
Unit 1. Insurance for Producers of Agricultural Products Objective 1 Using notes and references, plan an insurance program for a given hypothetical or actual agricultural business which coincides with the teacher's expectations for that business	A. Purposes of Insurance . Principle of spreading the risk . Reasons for buying insurance . protection . personal . family . business . protection from losses resulting from liability . personal . business investment features B. Motor Vehicle Insurance . Liability or bodily injury . Property damage . Medical payments . Comprehensive . Collision . Uninsured motorists C. Public liability insurance . Purpose of liability insurance . Types of liability insurance . Personal liability . Employer's liability . Costs of liability insurance

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion (use chalk board and/or overhead projector to discuss A & B.	A. To understand the necessity for providing insurance for home and business.	A. From the list of five principles of insurance the students should explain how an application is made when using some form of insurance with 90% accuracy.
B. Class discussion (use chalk board and/or overhead projector to discuss all items under content. Resource person (have local insurance representative explain the various motor vehicle insurance plans). Have students that have automobiles explain the coverage that they have.	B. To be able to determine what motor vehicle insurance is needed in an agricultural business and to be able to obtain the same.	B. The student should be able to plan for the insurance coverage of an automobile owned by the family, deciding which kinds of risks are most important for coverage and which may be appropriately borne by the owner or handled as a deductible item to the satisfaction of the instructor.
C. Class discussion (use chalk board and/or overhead projector to discuss content).	C. To understand the importance of liability insurance.	C. Given a specific farm situation, each student must be able to list several major types of items for which liability coverage is needed to the satisfaction of the instructor.

Code - 01.0211-04

Title - INSURANCE FOR AGRICULTURAL BUSINESS

OBJECTIVES BY UNIT	**CONTENT**
Unit 1, Objective 1 continued	D. Hospitalization Insurance . Importance . Cost
Unit 2 Life, health and accident insurance Objective 2 Using notes and references, plan a life insurance program for himself which coincides with the teacher's expectations	A. Life Insurance . Purpose of life insurance . protection . investment . Forms of life insurance . ordinary life . industrial life . group life . credit life . Types of life insurance . term . whole life . limited payment . endowment . combination . Life insurance contracts B. Fire, Wind, and Hail Insurance . Purpose . Type of peoperty to insure . Rates . Sources

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
D. Class discussion (use chalk board and/or overhead projector to discuss content).	D. To understand the importance of hospitalization insurance	D. Orally state the reasons that hospitalization insurance is important to a family.
A. Class discussion B. Resource person (have a local insurance agent discuss items in content). C. Display of materials (sample policies etc.) D. Personal experiences of students in class. E. Class discussion (use chalk board and/or overhead projector to discuss content). F. Obtain sample forms for students to study.	A. To understand the many life insurance forms & types B. Ability to plan a life insurance program for a family. C. Have class members divide into groups, each to develop educational displays on one of the types of life insurance. By use of bulletin boards, charts or other visual presentations, illustrate and report on the characteristics, especially the protection provided, by a unit cost of each type. D. To understand importance of property insurance; ability to plan a property insurance program. E. Students may role play an insurance agent presenting the insurance features of the various types of insurance. One student could present fire insurance, another crop insurance and so on, so that the features of each major form of insurance are covered. Time should be given for the class to critique and record the major features of each.	A. From a list of the kinds of life insurance, the student should correctly match each kind to the proper item from a list describing major features of each kind. B. Given a student's home farm situation, the student should correctly list two alternative ways of handling fire insurance and crop insurance.

Code 01.0211-04

Title - INSURANCE FOR AGRICULTURAL BUSINESS

OBJECTIVES BY UNIT	CONTENT
Unit 2, Objective 2 continued	C. Health and Accident Insurance . Necessity . Types . hospital expense . surgical expense . regular medical expense . major medical . loss of income . Sources and costs . Health insurance contracts
Unit 3. Workmen's Compensation Objective 3 List employee and employer benefits of Workmen's Compensation Insurance	A. Necessity B. Costs C. Benefits . Employer . Employee
Unit 4. Other Insurance Objective 4 Prepare an insurance program for ones own or a given hypothetical business.	A. What should be insured . Risks involved . What is the burden if a loss occurs . Is insurance required by law B. Types of insurance . Need to consider the size and type of business C. Cost of the insurance program

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
G. Obtain sample copies of forms for display and student study. Have students practice filling in health insurance applications.	F. To understand importance of health insurance. G. Ability to complete application forms. H. Ability to plan a health insurance program.	C. Orally explain what health insurance is. D. Fill out appropriate forms necessary to make a claim if an accident should occur.
A. Class discussion (use chalk board and/or overhead projector to discuss content)	A. To understand the necessity and importance of Workmen's Compensation.	A. Orally explain when a farmer must take out Workmen's Compensation.
A. Class discussion (as above) B. Resource person (have insurance agent to explain the procedure he uses in planning insurance programs for various clients) C. Display of materials on bulletin board and/or table.	A. Ability to plan an adequate insurance program for a small agricultural business	A. Have students actually plan an insurance program for their own business or a hypothetical business

RESOURCE MATERIALS

A. Books -

Resource Unit. Insurance in Agriculture by, Robert E. Morton, available from I.M.S. Cornell University

Instructors Manual and 15 Units of instruction. Agricultural Supplies Business and Service, available from I.M.S., Cornell University.

B. Bulletins -

See back pages of Insurance in Agriculture, by Robert E. Norton, available from I.M.S., Cornell University.

MODULE OF INSTRUCTION

Title - INCOME TAXES IN AGRICULTURE Code - 01.0211-05

DESCRIPTION:

People associated with production agriculture have been involved with taxes of one form or another since their inception. Students will be involved with both actual and simulated situations where tax forms will need to be correctly completed. State and Federal people will be invited to provide knowledge to students about income taxes. Much of the laboratory time will be spent visiting businesses and working out tax problems.

MAJOR DIVISIONS OR UNITS OF CONTENT	Time Allocations Class	Time Allocations Other
1. Uses of income tax money	1	3
2. Income tax forms	1	2
3. The need for complete records	1	3
4. Tax tables	1	2
5. Filing income tax returns	1	15
	5	25

Revised June, 1974

MODULE OF INSTRUCTION

Title - INCOME TAXES IN AGRICULTURE Code - 01.0211-05

OBJECTIVES to be obtained:

The student will be able to:

1. List four basic reasons for income taxes in our economy and at least ten specific local uses of the income tax dollar.
2. Given publication 22, organize and rank a breakdown of how the income tax dollar was spent during the previous year.
3. Copy from Ext. Bulletin 576 the important dates to remember for New York Farmers, and list the form which needs to be completed and mailed by that date, regarding income tax.
4. Copy and name 14 Federal, and 7 State income tax forms needed by New York Farmers.
5. Identify at least three essential composite records which aid in the completion of income tax forms.
6. Demonstrate his ability to differentiate between and use tables 1 and 3 of the federal tax tables.
7. Demonstrate his ability to differentiate among tax rate schedules x, y and z.
8. Complete income tax returns 1040A or 1040F and IT-201 and IT-202 for a given situation when given the necessary information.
9. Demonstrate the ability to complete Federal tax return schedules F and SE.
10. Given publication 17, demonstrate his ability to locate answers to ten instructor selected problems concerning Federal income tax.

Module INCOME TAXES IN AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
1. Uses of tax money Objective #1 . List four basic reasons for income taxes in our economy and at least ten specific local uses of the income tax dollar.	Purposes of income tax . Education & Health . Public Construction . Governmental Agency Functioning . National Defense . Income Security
Objective #2 . Given publication 22 organize and rank a breakdown of how the income tax dollar was spent during the previous year.	Your government dollar . Where it comes from . Where it goes
2. Income tax forms Objective #3 . Copy from Ext. Bulletin 576, the important dates to remember for New York farmers, and list the tax form which needs to be completed and mailed by that date.	Current calendar year . January . March . February . April
Objective #4 . Copy and name 14 Federal, and 7 State income tax forms needed by New York Farmers (from Bulletin #576).	Federal tax forms. State tax forms.

OBJECTIVES BY UNIT	CONTENT
3. The need for complete records. Objective #5 . Identify at least three essential composite records which aide in the completion of income tax forms.	Records: . Box of bill slips and receipts . Inventory . Cost account . Coop Ext. Computerized records . Records of individual enterprize • crop • animal
4. Tax tables Objective #6 . Demonstrate his ability to differentiate between and use tables 1 and 3 of the Federal tax tables.	Tables: . One exemption . Two exemptions . Three exemptions (NOT TO BE USED WHEN ITEMIZING) . Four exemptions Etc. through 15
Objective #7 . Demonstrate his ability to differentiate among tax rate schedules x, y, and z.	Tax rate schedules: . X - Single or married filing separately . Y - Married filing jointly . Z - Unmarried (legally separated)

Module INCOME TAXES IN AGRICULTURE 01.0211-05

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
Guest speaker - a public official.	Note taking. Discussion.	Oral or written test.
Supervised study. Teaching taxes programs. Publication 22.	Rank the breakdown of how taxes are spent. Prepare a bulletin board display of #1. Prepare newspaper items on taxes in notebook.	Instructor's evaluation.
Supervised study. A.E. Ext. 576. Publication 225.	Note - Dates and requirements needed concerning those dates. Post this calendar on the bulletin board.	Instructor's evaluation of notes.
Supervised study. A.E. Ext. Bulletin #576. Publication 225. Guest speaker . Lawyer . Banker . Other businessmen	Record the 14 Federal and 7 State income tax forms needed by New York State Farmers. Discuss reasons for using each form.	Instructor's evaluation of notes.

Module INCOME TAXES IN AGRICULTURE 01.0211-05

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
Visiting speaker - accountant, familiar with agriculture taxes.	Notes. Questions and discussion. Prepare an income tax form with records, and one without (2 groups in the class). Time this and record problems of each.	Oral or written test.
Lecture. Supervised study. Publication 17. Your Federal income tax.	Notes. Discussion of tables located for clarification. Discuss surcharge tables.	Teacher evaluation.
Supervised study. Publication 17.	Study and note each schedule, labeling the use of each.	Instructor's evaluation.

OBJECTIVES BY UNIT	CONTENT
5. Filing income tax returns. Objective #8 . Complete income tax returns 1040A or 1040F, and IT-201 and IT-202 for a given situation, where given the necessary information.	Federal Forms: • 1040 • 1040A • 1040B • 1040F • 1040D • 1040E & R Others when applicable Business income taxes: . Individual proprietorship . Cooperatives . Corporations . Partnerships Dicusss • Income • Schedule A • Itemizing deductions • Complete 1040 • Declaration of estimated tax Work on other examples in publication 22.
Objective #9 Demonstrate the ability to complete Federal tax return schedules F, and SE.	Farm income and expenses. Farm Income • Sales of purchased for resale livestock. • Sales of produce or livestock held primarily for sale. Farm deductions. Depreciation. Summaries. S.E. Social security self employment tax. • Net earnings from business other than farming • Net earnings from farming • Comp. of social security tax

EDUCATION

Module INCOME TAXES IN AGRICULTURE 01.0211-05

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
Demonstration. Class discussion. Supervised practical application. Use tax forms and enlarged examples.	Discuss. Complete sample form as teacher demonstrates the completion on enlarged copy of the form. Complete other forms using given information.	Instructor's evaluation.
Short review on information previously covered. Supervised practical experience completing income tax forms F and SE for filing. Si	Practice completing forms. Partnerships Corporations Individual	Instructor's evaluation. Neatness Unity Completion

OBJECTIVES BY UNIT	CONTENT
5. Filing income tax returns. (cont'd) Objective #10 . Given publication 17, demonstrate the ability to locate answers to ten instructor selected problems concerning federal income tax.	Section 1-41 Areas which may be used to answer question Example: . Dependents . Personal dependents & exemptions . Taxable income . Travel, transportation, gifts . Education . Sale of residence . Capitol gains and losses

Module INCOME TAXES IN AGRICULTURE 01.0211-05

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
Lecture - Introduction to and the use of the Federal tax dictionary. (Publication 17). Supervised (Problems solving) Practice	Use publication 17 to find the answers to simulated tax questions and problems posed by the instructor.	Instructor's evaluation.

MODULE OF INSTRUCTION

Title - INCOME TAXES IN AGRICULTURE Code - 01.0211-05

RESOURCE MATERIALS

BULLETINS

1. Farmers Tax Guide, Publication 225 - I.R.S. U.S. Government Printing Office, Washington, D.C.
2. Teaching Taxes Program, student edition, Publication 21, and 22 - I.R.S. U.S. Government Printing Office, Washington, D.C.
3. Teaching Taxes Program, teachers guide, Publication 19 - I.R.S. U.S. Government Printing Office, Washington, D.C.
4. Your Federal Income Tax, Publication 17 - I.R.S. U.S. Government Printing Office, Washington, D.C.
5. Tax Guide for Small Businesses, Publication 334 - I.R.S. U.S. Government Printing Office, Washington, D.C.
6. Employers Tax Guide, Circ. E, Publication 15 - I.R.S. U.S. Government Printing Office, Washington, D.C.

AUDIOVISUALS

Available I.M.S. Cornell University

Agricultural Supplies, Business and Service

15 Units of instruction and instructors manual

MODULE OF INSTRUCTION

Title - LEGAL ASPECTS OF AGRICULTURAL BUSINESS   Code - 01.0211-06

DESCRIPTION:

This module deals with some of the legal concerns of importance to agricultural businesses. Students will learn the essentials of a valid contract and review various kinds of contracts. They will learn to write checks and other forms used in keeping checking accounts. The very important concern of public and product liability is reviewed with many opportunities for student activities involved. Finally, some of the local, state, and federal regulations will be studied, with students sharing new knowledge with their classmates.

MAJOR DIVISIONS OR UNITS OF CONTENT	Time Allocation	
	Class	Other
1. Contracts	2	4
2. Negotiable Instruments	2	4
3. Public and Product Liability	2	8
4. Government Regulations	2	6
	8	22

Revised June, 1974

MODULE OF INSTRUCTION

Title - LEGAL ASPECTS OF AGRICULTURAL BUSINESS Code - 01.0211-06

OBJECTIVES to be obtained:
The student will be able to:

1. Recognize and identify the essential elements of contracts.
2. Write checks correctly and endorse them properly.
3. Fill out checking account deposit and withdrawal slips correctly.
4. Recognize hazards to the public and take appropriate accident prevention measures, at agricultural business firms.
5. Explain the importance of local, state and federal regulations to agricultural business firms.

Code - 01.0211-06

Title - LEGAL ASPECTS OF AGRICULTURAL BUSINESS

OBJECTIVES BY UNIT	CONTENT
Unit 1. Contracts Objective 1 Recognize and identify the essential elements of contracts.	A. Essentials of a valid contract B. Written vs. oral contracts . Situations when only written contracts are legal C. Types of contracts
Unit 2. - Negotiable Instruments Objective 2 Write checks correctly and endorse them properly.	A. Definition of negotiable instruments B. Types of negotiable instruments .Checks .Promissory notes .Bonds .Drafts
Objective 3-Fill out checking account deposit and withdrawal slips correctly	C. Types of checks D. Using a checking account .Deposits .Withdrawals .Bank statement .Reconciling check book balance with bank statement

EDUCATION 01.0211-06 - Code

LEGAL ASPECTS OF AGRICULTURAL BUSINESS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class discussion B. Lecture C. Resource person as a lawyer or other person knowledgeable about contracts. D. Obtain sample or specimen topics of various kinds of contracts for review and study by students. E. Students identify in each contract the essential elements.	A. Each student list the written or oral contracts he may already have entered into. B. Students survey local agribusinesses to determine the types of contracts used, summarize for the whole class. C. Each student attempt to write a personal contract for some purpose such as a work agreement.	A. Written test B. Evaluate contracts written by students. C. Test to check students' ability to identify the essential elements in a given contract.
A. Lecture B. Discussion C. Overhead projections of check forms, deposit and withdrawal slips, other. D. Obtain or prepare sample or specimen checks and slips for student practice. E. Directed student practice	A. Each student practice writing and endorsing checks and completing deposit and withdrawal slips. B. Some students may wish to imitate a personal checking account.	A. Practical test on check writing and endorsing, deposits and withdrawals.

Code - 01.0211-06

Title - LEGAL ASPECTS OF AGRICULTURAL BUSINESS

OBJECTIVES BY UNIT	CONTENT
Unit 3. - Public and Product Liability Objective 4 Recognize potential hazards to the public and recommend suitable accident prevention measures.	A. Public liability . Definition . Importance . Protecting risk through insurance .hazards covered .cost of insurance *refer to module: Insurance for Agricultural Businesses B. Product Liability . Definition . Importance . Protecting against risk . disclaimer of liability . warranty . careful selection of goods to be sold . "educating" customers . be safety conscious at all times

01.0211-06 - Code

LEGAL ASPECTS OF AGRICULTURAL BUSINESS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture B. Class discussion C. Resource person as local insurance agent or agri-businessman. D. Field trip to a local agri-business. E. Display product labels collected by students. F. Display protective devices used to safeguard the public at agricultural business concerns.	A. Students list potential dangers to the public as viewed on a field trip to a local agribusiness or survey local firms to determine various hazards. B. Students recommend to cooperating firms practices to lessen dangers existing, such as warning signs, color schemes, gates, railings, and protective clothing and others. C. Students collect product labels which have warranties or disclaimers of liability included. D. Students prepare charts or information sheets for customer and place them with cooperating firms. The charts and sheets to be safety precautions or instructions for safe use.	A, Evaluate survey and recommendations made by students. B. Written test.

OBJECTIVES BY UNIT	CONTENT
Unit 4. - Government Regulations Objective 5. Explain the importance of local, state and federal regulations to agricultural businesses.	A. Local or municipal regulations .Zoning laws .Building codes .Fire regulations .Health and sanitation laws .Sales procedure regulations .Sales taxes .Licenses .Other B. State and/or Federal Regulations .Labor regulations .Price regulations .Fair trade laws .Unfair practice laws .Price discrimination laws .Credit regulations .Food and drug standards .Anti-discrimination in hiring and choosing customers.

01.0211-06 - Code

LEGAL ASPECTS OF AGRICULTURAL BUSINESS - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Lecture-discussion to identify various kinds of important regulations which affect agricultural businesses.	A. Individual or small group reports to the entire class. Students select a given law or kind of regulation and study it from the point of view of its importance to agricultural businesses.	A. Evaluate oral reports.
B. Resource person from local city or village government to review important local regulations.	B. Students may prepare a panel discussion or forum presentation to be given at local service clubs and farm organizations.	B. Written tests.
C. Make available for student study references and copies of state and federal regulations of importance.		

MODULE OF INSTRUCTION

Title - LEGAL ASPECTS OF AGRICULTURAL BUSINESS Code - 01.0211-06

RESOURCE MATERIALS

Books:
Roy, Exploring Agribusiness, Interstate

Bulletins:
"You and Your Bank" - American Banders Association

MODULE OF INSTRUCTION

Title - PERSONAL FINANCIAL PLANNING   Code - 01.0299-01

DESCRIPTION:

Students will involve themselves with planning short, intermediate and long range personal budgets; initiating and using checking and saving accounts; and prepering plans for installment buying. Students will also study and prepare reports of banking operations and other financial institutions which deal with individuals.

MAJOR DIVISION OR UNITS OF CONTENT:	Time Allocations Class	Other
1. Budgeting and Planning	4	6
2. Financial Records and Accounts	4	2
3. Buying and Borrowing	6	8
	14	16

Revised June, 1974

MODULE OF INSTRUCTION

Title - PERSONAL FINANCIAL PLANNING Code - 01.0299-01

OBJECTIVES to be obtained:

1. The student will gather materials in (or add to) a notebook designed to aid the student studying agricultural supplies and services. This notebook material will be designated - Personal Finance and be completed to the satisfaction of the teacher.
2. The student will plan and construct a valid personal budget to the satisfaction of the teacher when given appropriate information such as the fixed monthly payments, income, and variable expenses.
3. The student will prepare an outline on the importance of preparing budgets, based on the information presented in class-to the satisfaction of the teacher. This will be placed in the student notebook.
4. The student can outline the types of savings and checking accounts and the procedure for setting up savings and a checking account with 100% accuracy. This process will be completed when the student is supplied the needed forms, and information such as the expenses to be paid by check, amounts to be deposited and saved.
5. The student will prepare a list of financial terms and their definitions from materials presented in class - to the satisfaction of the teacher. This will be placed in student notebook.
6. The student will describe on a written or oral test the advantages, disadvantages and actual dollar cost of various methods of installment buying, cash buying and borrowing. This test will be based upon information such as the length of loan, amounts borrowed or paid, discount rates, interest rates, etc.
7. The student will prepare a paper for oral delivery on the various aspects of buying and borrowing as presented in class - to the satisfaction of the teacher. This report will be placed in the student notebook.

Code - 01.0299-01

AGRICULTURAL

Title - PERSONAL FINANCIAL PLANNING

OBJECTIVES BY UNIT	CONTENT
Unit 1 - Budgeting and Planning Objective #1 The student will gather materials in (or add to) a notebook designed to aid the student studying agricultural supplies and services. This notebook material will be designated - Personal Finance and be completed to the satisfaction of the teacher. Objective #2 The student will plan and construct a valid personal budget to the satisfaction of the teacher when given appropriate information such as the fixed monthly payments, income, and variable expenses. Objective #3 The student will prepare an outline on the importance of preparing budgets, based on the information presented in class - to the satisfaction of the teacher. This will be placed in the student notebook.	A. Short Term budgeting and planning (0-1 month) . Goals and goal planning . Probable expenses . fixed . variable . Probable income . Emergency funds . Savings B. Intermediate Budgeting and planning (1 mo. - 1 year) . 1 - 5 Above under A. C. Long Term budgeting and planning (1 yr - 20 + yrs.) . 1 - 5 Above under A

EDUCATION

01.0299-01 - Code

PERSONAL FINANCIAL PLANNING - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Class Discussion B. Transparencies C. Resource People - . Local Banker - importance of budgeting . Use Chalkboard - personal experiences of class members	A. Students will spend time in a supervised study situation planning actual budgets (or sample personal budgets if circumstances warrant) . Short Term . Intermediate . Long Term B. Students will spend time in a supervised study situation preparing an outline on the importance and principles involved in budgeting - based on the report by the resource person.	A. Evaluation will consist of the completeness of the personal finance material in the notebook. B. The completeness of the personal budget will form the evaluation. This will include the outline as well as the finished budget.

Code - 01.0299-01

Title - PERSONAL FINANCIAL PLANNING

OBJECTIVES BY UNIT	CONTENT
Unit 2 - Financial Records and Accounts Objective #4 The student can outline the types of savings and checking account with 100% accuracy. This process will be completed when the student is supplied the needed forms, and information such as the expenses to be paid by check, amounts to be deposited and saved. Objective #5 The student will prepare a list of financial terms and their definitions from materials presented in class - to the satisfaction of the teacher. This will be placed in student notebook.	A. Types of Records . Home Made . Commercial B. Types of Accounts . Checking . Savings
Unit 3 - Buying and Borrowing Objective #6 The student will describe on a written or oral test the advantages, disadvantages and actual dollar cost of various methods of installment buying, cash buying and borrowing. This test will be based upon information such as the length of loan, amounts borrowed or paid, discount rates, interest rates, etc. Objective #7 The student will prepare a paper for oral delivery on the various aspects of buying and borrowing as presented in class - to the satisfaction of the teacher. This report will be placed in the student notebook.	A. Buying methods . Impulsive buyer VS. practical buyer . Bargains . Used vs new . Grade and quality choice B. Credit instruments and financial terms C. Installment buying and borrowing . Advantages and disadvantages . Types of installment buying . Methods of borrowing . Places to borrow . Calculating costs in buying and borrowing

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
A. Discussion . Personal experiences of class members (using their records). . Use record forms on transparencies and actual samples. . Resource people - have local banker discuss accounts and record systems B. Field Trip . Local bank - account system, process for selling up, accounts - checking - savings	A. Students will set up - . Personal accounting systems . Checking account . Savings account B. Student will take note on field trips for permanent records in notebook on agricultural supplies and services. C. Students will write up descriptive reports on information obtained from class presentations.	A. The student's completed outline will be evaluated for content and accuracy. B. The student will be able to orally explain the financial terms he has included in his notebook.
A. Class discussion - . Use chalkboard . Invite commercial business teacher to discuss items A - 1,2,3,4 . Use personal experiences of students. B. Class discussion - . Use overhead projector to show instruments and to define terms. . Refer to "Farm and Personal Finance" Chpt. 5 C. Class discussion - . Use chalkboard to list and discuss advantages and disadvantages. . Use overhead projector to show types of buying . Resource Person - to discuss methods of borrowing . Panel discussion - by students to compare places to borrow money . Demonstrate methods - to calculate costs of credit- . refer to "Farm and Personal Finance" chpt.8	A. Students will spend time in a supervised study situation to develop a list of financial terms and their definitions. This is to be put in their Agricultural Supplies and Service Notebook. B. Students will practice calculating the actual cost of installment buying and other forms of credit. Formulas used will be kept in student's notebook. C. Students will write a paper for oral delivery on the various aspects of buying and borrowing. This paper will be placed in the student notebook.	A. Evaluation will be on the accuracy of the oral or written test. B. Evaluation of the oral report.

MODULE OF INSTRUCTION

Title - PERSONAL FINANCIAL PLANNING Code - 01.0299-01

RESOURCE MATERIALS

A. Books - "FARM AND PERSONAL FINANCE"
Edited by John R. Brake - The Interstate Printers and Publishers, Inc. Danville, Illinois

B. Bulletins -

MODULE OF INSTRUCTION

Title - COMPUTATIONS IN AGRICULTURE Code - 01.0299-02

DESCRIPTION:

Emphasis for the student will be placed on mastering the basic skills in agriculture mathematics, which can be put together to solve practical agricultural problems.

Students will perform the measurement and other computational skills commonly used in agriculture. Time will be spent throughout the module solving agricultural problems relating to students' individual occupational goals.

DIVISIONS OR UNITS OF CONTENT	Time Allocation Class	 Other
1. Agricultural Measurement Skills	3	11
2. Agriculture Computational Skills	4	12
	7	23

Revised June, 1974

MODULE OF INSTRUCTION

Title - COMPUTATIONS IN AGRICULTURE Code - 01.0299-02

OBJECTIVES to be obtained:

The student will be able to:

* 1. Correctly determine lengths of given distances and convert the lengths to other specified units of linear measure.

2. Correctly calculate total units in areas shaped as a square, rectangle, triangle, circle or irregular shape, given the needed dimensions.

3. Correctly calculate total units in volumes shaped as a cube, rectangle, pyramid, cylinder, cone, or irregular, given the needed dimensions.

4. Correctly determine weights of given volumes, both by using scales and multiplying the unit weight times calculated units in the total volume, then converting the weights to other specified measures of weight.

5. Correctly calculate given percentage problems relating to agriculture.

6. Correctly calculate given proportion problems relating to agriculture.

7. Correctly calculate simple interest, true interest, and dollar cost of loans, given the necessary information.

8. Correctly calculate given depreciation problems using; sum of the digits, straight line, and declining balance methods.

9. Correctly calculate given efficiency problems commonly used in agriculture.

*The conditions under which the problems will be solved should be left up to the discretion of the instructor based on his students' mathematical background and ability. All problems, however, should be correctly solved by a student if given a conversion and formula sheet. Instructors may require that some or all formulas and conversions be memorized.

OBJECTIVES BY UNIT	CONTENT
Unit 1. - Agricultural Measurement Skills Objective #1 Correctly determine lengths of given distances and convert the lengths to other specified units of linear measures.	A. Units of lengths used in Agriculture . Millimeters . Centimeters . Decimeters . Meters . Kilometers . Inches . Feet . Yards . Miles . Rods . Chains . Links B. Converting units of length . See charts in references C. Determining lengths . Measuring total length . Measuring unit part to determine total length . stress accuracy due to multiplying effect of error. Ex. forgetting the mortar between bricks can cause an 8% error. . Comparing known to unknown lengths. . Other D. Sample Type problems . Length of building based on No. of bricks or blocks then convert it to various units of length. . Length of classroom as measured, then converted to various units of length. . Length of a field near school as measured then convert it to various units of length. . Height of a silo based on length of stones, then convert it to various units of length.

EDUCATION

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture discussion to present factual information.	A. Take note of new information.	A. Written test(s) on conversion and measuring to determine . Knowledge of material (40%) . Accuracy (40%) . Speed (20%)
B. Demonstrations of conversions and determining lengths .	B. Assist in conversion and measuring demonstrations.	B. Evaluate individual problems students solve.
C. Student practice.	C. Practice converting lengths and determining lengths of given problems.	
	D. Each student present and solve an actual problem of his own involving length.	

OBJECTIVES BY UNIT	CONTENT
Unit 1. (continued) Objective #2 Correctly calculate total units in areas shaped as a square, rectangle, triangle, trapezoid circle, or irregular shape, given the needed dimensions.	A. Formulas to use in determining areas of given shapes. . Square = length of side squared or length of side X length of side. . Rectangle= length X width . Triangle= ½ base X altitude . Circle= π radius^2 . Trapezoid=altitude X $\frac{\text{sum of bases}}{2}$. Irregular=convert parts to above and solve. B. Sample type problems . Determine square feet and no. of acres for a field. . Determine sq. ft. for a building and sq. ft. allowed per animal. . Determine cost of putting in a ceiling for a given building. . Determine shelf space needed for given items. . Determine area needed for trees planted a given distance apart. . Determine area of base of a silo or round storage. . Determine squares of roofing needed for a given building.

EDUCATION

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture-discussion to present formulas and procedures.	A. Take note of new information.	A. Written test on use of formulas to solve area problems. . Ability to select and use formula. (40%) . Accuracy (40%) . Speed (20%)
B. Field trip(s) to gather data.	B. Assist in gathering information for problems to solve.	B. Evaluate individual problems students solve.
C. Student practice in formulated and actual problems.	C. Practice solving problems using area formulas.	
	D. Each student present and solve an actual problem of his own involving determination of area.	

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

OBJECTIVES BY UNIT	CONTENT
Unit 1. (continued) Objective 3. Correctly calculate total units in volumes shaped as a cube, rectangle, pyramid, cylinder, cone, or irregular, given the needed dimensions.	A. Formulas to use in determining volumes of given shapes. . Cube or rectangle=Length X width X height . Cylinders=πr^2 X height . Cones and pyramids=area of base X height $\div$ 3 . Irregular volumes - Break into above forms and calculate. B. Sample type problems . Determine amount of hay in a given volume. . Determine grain in various shaped storage area. . Determine volume of silage in a silo. . Determine board feet of lumber. . Determine cords of wood. . Determine volume of concrete needed for an area. . Determine soil that has to be moved to dig a pond. . Determine gallons of water held in a pond.

EDUCATION

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture - discussion to present formulas and procedures. B. Field trip(s) to gather data. C. Student practice in formulated and actual problems.	A. Take note of new information. B. Assist in gathering data for group problems to solve. C. Practice solving problems using volume formulas. D. Each student present and solve an actual problem of his own involving determination of volume.	A. Written test on use of formulas to solve volume problems. . Ability to select and use formulas (40%) . Accuracy (40%) . Speed (20%) B. Evaluate individual problems students solve.

OBJECTIVES BY UNIT

Unit 1. (continued)
Objective 4.
Correctly determine weights of given volumes, both by using scales, and multiplying the unit weight times the calculated units in the total volume, then converting the weights to other specified measures of weight.

CONTENT

A. Units of weight used in agriculture
- . Drams
- . Ounces
- . Pounds
- . Tons
- . Milligrams
- . Centigrams
- . Decigrams
- . Grams
- . Kilograms

B. Converting units of weight (see conversion charts in references)

C. Methods of weighing
- . Using scales
  - . types of scales
  - . accuracy of various scales
  - . presetting and checking scales
- . Estimating using known unit weights

D. Sample type problems
- . Determine weight of grain on a truck, then convert to various units of weight.
- . Determine weight of milk in a bulk tank, using volume method.
- . Determine tons of hay in a stack or mow.
- . Determine tons of silage left in a silo. (Use chart to get settled weight per cubic foot.)
- . Determine snow loads on buildings (good lab. project in winter)
- . Determine weight of liquid in a tire.
- . Any number of objects can be weighed using scales, then convert results to other units of weight.

EDUCATION

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture - discussion to present new information.	A. Take note of new material.	A. Written test to determine knowledge of units of weight. Ability to get total weights and accuracy.
B. Demonstrations of problem solving and use of scales.	B. Assist in demonstrations and field trips.	B. Evaluate individual problems each student solves.
C. Field trip(s) to gather data for class problems.	C. Practice weighing, and determining weights, then converting the results to various units of weight.	
D. Student practice.	D. Each student present and solve an actual problem of his own involving weight.	

Module COMPUTATIONS IN AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Unit 2. Agriculture computational skills. Objective #5 Correctly calculate given percentage problems relating to agriculture.	A. Three ways of expressing per cent . Decimals (.25) . Fraction ($\frac{25}{100}$) . % sign (25%) B. Converting to per cent . Decimals to per cent . Fractions to percent C. Rules to solve problems involving percent. . To find the per cent of a number - express the per cent in its decimal form and multiply the given number by the resulting decimal. . To find what per cent one number is of another - divide the first number by the second and change the quotient to per cent. . Finding a number when a per cent of it is known- first find what 1% is and multiply by 100. (or use a proportion) D.. Sample type problems. . Figuring milk butterfat %. . Determining discounts and markup. . Determining commissions . Determining field crop and storage losses. . Determining shrinkage and dressing percentage. . Determining moisture contents . Determining % profit. . Determining land slope

EDUCATION

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture-discussion to present facts or formulas. B. Student practice.	A. Take note of new information presented. B. Practice solving percentage problems given by instructor. C. Each student present and solve an actual problem of his own involving percentage.	A. Written Test. B. Evaluate individual problems students solve.

OBJECTIVES BY UNIT	CONTENT
Unit 2. (continued) Objective #[illegible] Correctly calculate given proportion problems relating to agriculture.	A. Ratios expressed three ways: . 1:3 one is to three . 1÷3 one divided by three . 1/3 one third B. A proportion is the equality of two ratios . To solve a proportion multiply the numerator of each fraction by the denominator of the other. C. Sample type problems . Cost of any number of items if you know the cost of a given number. . Determining Feed required for any amount of time if you know the amount required for a specific time. . Solving feeding problems involving two types of feeds. . Solving slope problems . Determining indexes . Determining yield for any area if you know the yield for a specific area.

EDUCATION

Module COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture - demonstration B. Student practice	A. Take notes of new material B. Practice solving proportion problems in class C. Each student present and solve an actual problem requiring the use of proportions.	A. Written Test B. Evaluate students individual problems.

OBJECTIVES BY UNIT	CONTENT
Unit #2 (continued) Objective #7 Correctly calculate simple interest, True interest, and dollar cost of loans, given the necessary information.	A. Calculating Interest rate. . Simple Interest rate= $\frac{\text{Dollar Cost}}{\text{Principal X Time}}$ or $R=\frac{D}{PT}$. Dollar Cost= Principle X rate X Interest or D = PRT . True Interest rate $=\frac{2\ MD}{P\ (N+1)}$ Where: M = No. % payments per year D = Dollar Cost P = Principal N = Total number of payments
Objective #8 Correctly calculate given depreciation problems using; sum of the digits, straight line, and declining balance methods.	A. Types of Depreciation . Straight line . examples of use . method - deduct an equal amount each year until item is depreciated or down to salvage value. . Declining Balance . examples of use . method - refer to tax guide for farmers. . Sum of the digits . examples of use . method - refer to tax guide for farmers

EDUCATION

le COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture - discussion to present formulas. B. Student practice	A. Take note of new information. B. Practice solving problems using each of the interest rate formulas.	A. Written test.
ective #8 A. Lecture - discussion to present facts and formulas. B. Student practice	A. Take note of new information. B. Practice solving problems using each of the depreciation methods. C. Each student set up a depreciation schedule of each type on some item of his own.	A. Written test. B. Evaluate students' individual depreciation schedules.

OBJECTIVES BY UNIT	CONTENT
Unit 2. (continued) Objective #9 Correctly calculate given efficiency problems commonly used in Agriculture...	A. Defining Efficiency = $\frac{\text{output}}{\text{input}}$ B. Importance of efficiency in a free enterprise agriculture . Examples showing increased income due to efficiency. C. Sample type problems - . Pounds of milk sold per man . Pounds of feed per dozen eggs . Pounds of feed per pound of grain . Acres of cropland per animal . Gallons of gas per acre harvested . Productive Work units per man.

EDUCATION

[illegible]le COMPUTATIONS IN AGRICULTURE 01.0299-02

TEACHING METHOD	STUDENT APPLICATION ACTIVITY	EVALUATION PROCEDURES
A. Lecture - discussion to show importance and calculations.	A. Take note of new material.	A. Written test.
B. Student practice.	B. Practice solving given efficiency problems.	B. Evaluate students' individual problems.
	C. Each student present and solve an actual problem of his own involving efficiency.	

MODULE OF INSTRUCTION

Title - COMPUTATIONS IN AGRICULTURE Code - 01.0299-02

RESOURCE MATERIALS

Books - *Arithmetic in Agriculture, Finshe, Drake, Edson - Available from Interstate Publishing, Danville, Illinois

Agricultural Business and Industry - Weyant, Hoover, McClay- Available from Interstate

Course of Study in Agricultural Occupations - University of Kentucky, Lexington, Kentucky.

Principles of Agricultural Finance - Teaching unit publishes by Farm Credit Banks of Springfield.

Farm Management Handbook - Cornell Dept. of Agr. Economics

Bulletins- Farmers Tax Guide - Latest Edition

Audiovisuals - Principles of Agriculture Finance - Transparencies for calculating interest

* Especially useful, one should be available for each student.

MODULE OF INSTRUCTION

Title - COMMUNICATIONS IN AGRICULTURE Code - 01.0299-03

DESCRIPTION:

Every student enrolled in this module will develop an ability to converse on the telephone, present a rational discussion for a student and adult group, prepare and present a radio topic. Students will also prepare business letters and a technical report. Use of various dictionaries, a thesaurus and technical reports on agriculture will be stressed.

MAJOR DIVISIONS OR UNITS OF CONTENT:	Time Allocations	
	Class	Other
1. Speaking	4	11
2. Business Letters	3	6
3. Technical Reports	2	4
	9	21

Revised June, 1974

MODULE OF INSTRUCTION

Title - COMMUNICATIONS IN AGRICULTURE Code - 01.0299-03

OBJECTIVES to be obtained:

The student will be able to:

1. Present a six minute oral report to the class with no aids, except an outline on a 3 X 5 card in the student's pocket, which may be referred to not more than twice during the presentation.
2. Demonstrate, to the instructor's satisfaction, ability to properly answer, place calls on, converse on, and record adequate information from a call taken for someone else.
3. Prepare, to accepted broadcasting standards, a two minute radio spot announcement.
4. Evaluate at least five oral presentations and indicate improvements needed on an evaluation form provided.
5. Prepare and mail a business letter to an agricultural firm.
6. Prepare a technical report, as specified by the instructor.

Code - 01.0299-03

Title - COMMUNICATIONS IN AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Unit #1 - Speaking Objective #1 - Present a six minute oral report to the class with no aids, except an outline on a 3X5 card in the student's pocket, which may be referred to not more than twice during the presentation.	A. Selecting the topic B. Preparing the speech . Making an outline - • introduction • body • conclusion C. Presenting the speech . Learning a speech . Poise, posture, gesture, voice. . Maintaining contact with the audience. . Summarizing the speech . Answering questions D. Methods of evaluating your effectiveness.
Objective #2 - Demonstrate, to the instructor's satisfaction, ability to properly answer, place calls on, converse on, and record adequate information from a call taken for someone else..	A. Proper and effective use of the telephone. . Answering the telephone . Conversing on the telephone . Taking calls for someone else . Placing calls on the telephone
Objective #3 - Prepare, to accepted broadcasting standards, a two minute radio spot announcement.	A. Selecting the topic B. Preparing the announcement . Use key words . Say the most with the fewest words . Catch and maintain interest . Gear the announcement for the intended audience. . Prepare it as requested by the station C. Presentation . Using broadcasting equipment . Developing speaking speed and tone for broadcasting. D. Evaluating the broadcast

01.0299-03 - Code

EDUCATION

COMMUNICATIONS IN AGRICULTURE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
Lecture-discussion to present information. Student supervised study to prepare speeches. Student practice.	Each student will prepare and present a six minute oral talk.	Evaluate each student's preparation and presentation.
Lecture - discussion to present information. Student practice.	Students will use training telephones from the telephone company to practice on.	Evaluate student's ability to use the telephone.
Lecture-discussion to present information. Resource person from local radio station. Student practice.	Take note of new information. Prepare a two minute radio spot announcement. If possible have some announcements broadcasted.	Evaluate written radio announcement. Evaluate broadcast.

Code - 01.0299-03

AGRICULTURAL

Title - COMMUNICATIONS IN AGRICULTURE

OBJECTIVES BY UNIT	CONTENT
Objective #4 - Evaluate at least five oral presentations and indicate improvements needed on an evaluation form provided.	A. Evaluation forms such as those used for public speaking contests.
Unit #2 - Business Letters Objective #5 - Prepare and mail a business letter to an agricultural firm.	A. Parts of a business letter . Letterhead . Dateline . Inside address . Salutation . Message (body) . Complementary close . Signature Additional parts that may be included . Initials of dictator and secretary . Subject . Attention line . Enclosure references . Postscripts B. Letter forms . Indented form . Block form . Modified block form C. Rules for preparing business letters. . Envelope . Letter
Unit #3 - Technical Reports Objective #6 - Prepare a technical report, as specified by the instructor.	A. Preparing technical reports. . Follow instructions for each type of report . Use accepted terms. . Use neat methods (printing, typing) . Make reports complete.

EDUCATION

01.0299-03 - Code

COMMUNICATIONS IN AGRICULTURE - Title

TEACHING METHODS	STUDENT APPLICATION ACTIVITIES	EVALUATION PROCEDURES
Student practice	Evaluate at least five oral presentations.	Evaluate the student's evaluations.
Lecture - demonstration Student practice	Take note of new information. Prepare at least one business letter to be mailed.	Evaluate student's letter.
Lecture - demonstration of preparing technical reports. Student practice.	Each student prepare at least one acceptable report.	Evaluate the student's reports.

MODULE OF INSTRUCTION

Title - COMMUNICATIONS IN AGRICULTURE Code - 01.0299-03

RESOURCE MATERIALS

A. Books - HOW TO SPEAK EFFECTIVELY, George Eric Peabody published by John Wiley and Sons, Inc.

The Elements of Style, William Strunk Jr. and E. B. White published by MacMillan and Company

Any Good High School English text or Business text should be helpful.

B. Bulletins - Samples of technical reports and radio announcements would be helpful.